

00196US1.ST25
SEQUENCE LISTING

<110> Vogeli, Gabriel
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CONFIDENTIAL

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 <212> DNA
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 <212> DNA
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 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 25
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 <212> DNA
 <213> Homo sapiens

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gaattagcaa gtaaagacta attggaagcc aatcttttgc aaatttttta aatgtaagtt	360
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 <211> 602
 <212> DNA
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 <212> DNA
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<210> 38
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 <212> DNA
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<210> 40
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 ctgctagggtg ttatctggtc tctgct 626

<210> 41
 <211> 685
 <212> DNA
 <213> Homo sapiens

<400> 41
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 aattctagta gttggagagt ccaccatccc taggaatgta gttctgttcc tcattggttca 120
 atatagctgc tgatgctcca gccattacag ccacattcca gacagcaaaa tatggaaaga 180
 gaatgaagag aagaagagcg tgcctaggag tcccatgtat tatttccata tatatttggg 240
 cagaacctag tcacaggggcc actgcatacg tatctgttag ctattgttac atagcaacca 300
 caaaatttcc atgtcatata acacatatct gcaggttggc tagggttcag ttccctccatg 360
 ctgggtctcag acaggcagtt ctgcttcggg ttacagtggtc tgagctgatt ccattttcca 420
 ctgcaggctc gtgtttcagt tgagtgaactg tcccatgtgc etttcatctt ccttggggttg 480
 atgaaaaggaa gccacatctt tcaacagggc tagccacatc tgttccctcat ggcccaaaaga 540
 gacaccaaag agcagataga aatagggtgag acctcttaag gtctagactc aaaactggca 600
 cactgccacg tctgttcaca agctattagc caaagcatag atgcattacc aagccccaag 660
 tcaaggggcaa gaagtacaat ccacc 685

<210> 42
 <211> 566
 <212> DNA
 <213> Homo sapiens

<400> 42
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 agataaatgt ttgtggtgat gcataattca agtacccctga tctgataatt gcacattgta 120
 tacatctatc aaaaatctag cagtacctcc aaaaatagct caattattgt ataagtacaa 180
 aaaaatttaa acaattataa tgtattattt atttctaaat ggtttattag attttaaatt 240
 ttcttggtgt ttaatttttt catatattac cttataccct ttaacttctt aaaatatatt 300
 aggtcttcat attttagagt aaaattctga aaatcctttg agtatctgat tttaacaatt 360

ttcttccac tgattttccc ttagcaatgg cctgtttaaa gtgttgat gatgttactg 420
 agaaatgggc tggctacctg atgcacatag aagccaatac tatggcagtg gttttctaga 480
 aaagaaaagg ctttactctg agtctactgg caaggagaca ggtggcaaca ctcaaatctg 540
 tcctccctgaa ctgaggatgg tgggg 566

<210> 43
 <211> 578
 <212> DNA
 <213> Homo sapiens

<400> 43
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 gtatgaaaat ctgcccattc cctttatctt tttctctctt tctcatttac agccctgtgc 120
 tagttttctt attcccttca agttctggcc aaactttatt taacctctga ctgacccatc 180
 catctaaaa agtactcatc actgtgtatc cctcaaac acctttatagg tcatggccat 240
 cacctgataa tgtgttatgt atttttgggt ttacttgttg tgttagttca ttcttgcatt 300
 gctgtaaaaga aattcctgag actgggtaat ttataaagaa aagaggttta attgactcac 360
 agttctgcag gctgtatggg aagcatgttg ctggcatctg cttggcttct ggggaggact 420
 caggaaactt acaatcatgg ggaaggtgac gggggagcag gcacatctga catagcagga 480
 gcagcaagtg agcaaagggg gacgtgccac acacttctaa gtaaccagac ctcatgagaa 540
 ctactatca tgagaacagt accaggggat ggtgctag 578

<210> 44
 <211> 684
 <212> DNA
 <213> Homo sapiens

<400> 44
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 ctggttatag gtgtctatc cacagttttt ggctgtctgt ggaacaacaa tctagtgcga 120
 ctccagcaat gtgagtata gtgcaaatgt caaaccagag cagcatcacc atctagaggt 180
 caaaaatgata actgcaaaact ttctcacctt tatgagcctt cgtattctgt tatacatagc 240
 agtttatgtg aatgtacaga aaataatgtt tgctattgtt ttctctccag ttgggtttcc 300
 agaaagagat catggcataa agcaggaacc acctgtattt acagatggca tagggaagca 360
 tacatcgtag agccatatat cagcagcact acagcatgtt tcaacaaaag atgagcctcc 420
 cacatgtcag acaaacaccac tacattggga ccacagcagt gacagtgttt tttagcacat 480
 tcttgataat gaaatctatg ttgaactcaa catgaatggc ttttctcttc tcttggcagt 540
 caacagccta caccattctg catttgactg ttagtttat tctccctctc ggaaaggcat 600
 gactatggaa acagagtaga ggatatattg gggatttatg aaactattaa tataatttac 660

tctcattgct gtgctttcta caaa

684

<210> 45
 <211> 693
 <212> DNA
 <213> Homo sapiens

<400> 45
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 acaatgttta taggtagctg tatgggtgtt gacacagcac atggcgtaac tttaaaacaa 120
 ttatagcact gggatttga tctgaattta tgttgccttg tcaaagtctt cttttgttaa 180
 catggtagcc ttttaaatat taggcagcta cctgcaacac tgggcattca gactaaccca 240
 tcaggcttat ggcattctgc tcttctcgtt cctctctgt gtgttggtac atcatgttag 300
 gtttatgcag tagacgtaga taggaagcaa gccaatggc tacagggtat tgaagtgcaa 360
 ttgctgagaa tgataaaa caagatagc cttctctgca aagaagtgtc aagaagattc 420
 taaacgtata caaggatctc aagagaaaca gtcccagata gcaacactat tcagttttag 480
 actatggctg atactatata cttctccagc tcctctgctc ctgagagcag aaaaacagaag 540
 attttgaaat gaggaccacc ccagctctcg aatacaatgg taccttctat ctatttctgg 600
 tgacttttat tttcttttgt tgcgtgatcc cctacataat tgtaagcata tcgcaggcaa 660
 gcacaatggt aaacagtggg tggacgtctc ctc 693

<210> 46
 <211> 677
 <212> DNA
 <213> Homo sapiens

<400> 46
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 gttgtattg aaaagtgtct taaagggtcac cactgtaacc ccttcattgt gcttgagacc 120
 tgctcagctc ctaaaattta caggggacgg atctgagaaa ctgactccaa gttgtaacct 180
 cttgcttagt tttctttcta gggagatata cgtctctcca aacctgtcga aatctaaatt 240
 tattacctct tacctaatac ttgggtccct gtggacttca cttcactgtt tgtgtctaata 300
 gccctttcat caccattctg actttggatt ctgagagcac acctacttcc cactttctctg 360
 tgacccttca attctctctg tcagtcacta tgtctgattt attgttctcc cctatctttt 420
 gccctttgca aatctctcaag cctcattctt ggttcagacc tttaaaaggc tgagttactg 480
 gagtataatg ttacccaag tgagttgttc cataaaaaat tagtaagttg gaaaaaaaaa 540
 caaaaaacaa aaaaataccc taccataaaa gttggttaaa gtctctgtaa aaaggggtcc 600
 ttggccaggt acatgttaga atagctgggt aagtttcttt gcagaaagac ttctcctggc 660
 cttcatttgt gactgtg 677

<210> 47
 <211> 729
 <212> DNA
 <213> Homo sapiens

<400> 47
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 gaaaaatgta cagaatttct cctaacaatg tcattgcttc aaccagctac aaatttccaa 120
 cctagtttct tctttttgct gtttcttctt ttgtctttga tacaatcata cagcctctct 180
 tccttgaa gaataaaaa gactaacagt taaaagatct ggaagactca tattcttttc 240
 ttttctactg gctacgggtt tgaagaaggg ctgttgctt ttgatttttt cttttgggtt 300
 ctttcatcgc ccaattcaa acaggtctgc tctcaaagaa aacaaatcaa aattgtcaag 360
 acctgtgaag catgaaaaat aaattgcttt ttccaactcc aaaaagcacc agaaaagcat 420
 taattttgat cttttataaa cctctatccc ctatcctcta atctatagat ttcacagaat 480
 gtttatatat tcttctgtat aatacaggag atcaaacctt attatgaata aattgaattg 540
 aacctgtaat acaactaata tttaaactag tgattttttg gattcaact agacacatat 600
 aaaacatttc aagtgaatg acacaaatc ctggggctgc cagtataaaa taaacagctc 660
 agtaagctgc atctaccatg ccgttaaggg actctgtcct ttagctggt gggagcacag 720
 gcttcataa 729

<210> 48
 <211> 595
 <212> DNA
 <213> Homo sapiens

<400> 48
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 ttactttaat ttattttaat ttactaattt ttaagtatta acctattttg tttttattaa 120
 atctctgttg ttgcacagaa ttcaaatgac agcaaaaatc attcagggct aaacactgga 180
 aaaatctctt aattctaaag tacatgacac aatggactca aaaacagttg ctgagtcctt 240
 ttactggag aaatttaaag aaagggtata gaaaagtttt gaccaattcc acccaatcct 300
 gcatcccaaa ttccaatctc aaggaccagt ttccatctga tctctctcca cctacagatg 360
 gtggctctga atctccaaat caacaaacca aaaactgaat ccatcatctt ctacacactg 420
 gtttttctt ccaactccct catttctgtg acctgcccc taaccttacc aggaatccag 480
 ccccaaaagc aggggtgact cctccctctg caatggacac cagggtattca ggtcctgttg 540
 ctggtcccaa aatgccca caagccctgt ctcccaaatc agcacattca acagt 595

<210> 49
 <211> 710
 <212> DNA
 <213> Homo sapiens

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<400> 49
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cccatgagct ctgtggttgc cacttttttg cccattatga accgacgtcc ccttggcatc 120
taccagggac tccctcagga gagtggtgga atgatggggg aagactcgte actcttttgt 180
agagcgtggg gcagatgata gcagagacct tccagggccc agggctgggg tcttgtcttc 240
cttggatgtg gtctagcgtt gctccagatg gtgggtttgt ggcagggtgg gcagaagcag 300
atgatgcagt tgaggcgggt ctctgttaga gagtgatgtc aaagatgagc actcctttta 360
tccccgact ctctgagga tggctgcctc cttggtgagc cacttggagg tctcaggccg 420
atcatgcggg atgtgtggcc agatgaggaa ggggatccaa ggcggtggcc ttccagatg 480
cactgggccc cagcccttct tcctagcttc ggctgattac tgtgggcttc agcaaccagg 540
gcctacctgt aggtctccac atttgaagc accacagaac ccagtgcctc tttgtgcact 600
caaatcggcc ttgatccagg ggtattttct cattcagaac acactttgaa aggcggccat 660
tccccctctg gagaagcct ggagaatcta cagtgccctt aattacagt 710

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<210> 50
<211> 550
<212> DNA
<213> Homo sapiens

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<400> 50
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ggaagacttg cgctctaag agtaaaaggc ctcccagaga ggacatggat gaaaggagga 120
ccaccttcca atgcoactct ccaaagcagg aaacatccaa ataaaggatg ttgattttca 180
ggaccccatc ccttcctgag tgcttacaca actggtatat cctctccctg ctctctctct 240
ggtagccaag accttatacc agtttgagta tcctttatcc aaaatgcttg gggtcagaag 300
tgttttgaat ttcagatatt tttaaatttt ggaatattta tatcatacct cttggttgaa 360
ccttcagat acaaaaatct ggagtccagt gagtatttcc tttgagtgtc atgtcagtgc 420
tcaaaaagt tttagatttt gagcgtttca gatttcagg ttttgaattt ggaatactca 480
acctgtactc tctgtccttg ttctacctct accagaccct ccccccagc aatgaattta 540
gatctgaaaa

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<210> 51
<211> 747
<212> DNA
<213> Homo sapiens

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<400> 51
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aaacaatttc accacagtaa cttgttaate gggcatcctt taagtatgct ggatttaaca 120
ctggaagttc ttttgaagac tctgaaagtt ttctttaate gtcattgagat ttttccaaac 180

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taagttcatg atattggattt ttttactgt atctagctta agtcacattt caattcaaat	240
ctaaacctaa actgatggag ctggagctag tgacttcagg caattggcat cttttcgtg	300
aatacaaca tcctatttaa aagaccaa acatgactcc attcaaaaaa taaaacagtc	360
atgtgtagtg aaacagcaag aacacggtct gagaaacgtg tccttgacac cacagcgtga	420
atgcactcac gcaagcctag acggtgcggc tgccgcacac caggccctgt ggtacagcct	480
gtcaattcca ggcoccaaag ctgcatacca tgttgctgtg cgggacgtg ccggcggctg	540
tagacaatg ctaagtatct gtgtatctca acacagaaga ggtagagtaa agtacagtat	600
tatgatcgta cgggacgcgt gttgtacaca cagtctatca ttgatggaag catcggtata	660
tggcacatta ctgcactgta aaaagacacc aaacttcggc cggcgcaagt gctcatgcct	720
gtaatcccg cactttggga ggctgag	747

<210> 52
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 52	
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gggtctgtag agagaagaaa atgtccttgc ccatgaactt cttgcaggta tttatcttgc	120
ttctttatct tactaaaaat agaattgaaa gtttttcatt ttttgttttt caattttaga	180
ggatacaatg gagattcagg aacgaataga aaatagtttt aagtccttac tagaccagtt	240
aaaaggtaag ttttcttact gtgatttctt gtatttgtat ctggttgtat ggcaatagct	300
togaagttct tttccctatt cccaagccca atcaccaga gataagtaag tagttttaac	360
actttggagt caatactctt agatgccacc taaacacata tgtgtgtgaa tgaataatca	420
gataaaaagt aatctttaaa cataggaaat ggtgtaatcc atgtcttttt gactttaatt	480
tttttgttat tttgataacc tttccatgtc agttatatat accccattta ttttcaagac	540
tgcgtaatat tctatagtat tgtattaaca ttttttatgt tatcgcaatt ggtgacatat	600
tatgtatatg agttattttt tctactgatg ctgaaatgaa tatcttggga caaattgtta	660
ggggtattat ttgagtcctt ccttgggatt aaatt	695

<210> 53
 <211> 735
 <212> DNA
 <213> Homo sapiens

<400> 53	
cttttgagga ttaaaaaattc ctgcttactg togttataac acggggatta ataagcacct	60
tactggaatc tctcacctac cataatttta gtatgctatg tgagggaatg aacagttcta	120
cacatttaatt aatgactact catataatgc ttttaattgg taatgacctat tatgaaacat	180
gatataaaaa acacattaca gcttctcaaaa tgaccacctat aagttaacca attgcttagg	240

ttcttgacaa atttgaatct ggccccatgc acctttgtcg ggccccacaa aacaaggagg	300
tagattattt atgaaggatc accactctgg caatatcacc attaaatatt aagctcatct	360
ggccccatgc tcctccatct tcaggtcacg gactctggat tggaatgacc tacctccaca	420
ttcagttctg taagtcatca ggcatcatcc aagatggtag atgatgaata aatggacaat	480
gacttaagct ttttttactc tctcatccat tccaatgctt tcttcctcgg tctttgtcga	540
ttatttccat gttatttaata atatatgttg aagaattcat ggcagtgata acaataatgg	600
gtacaatttt ttattaccta tgtatgccag gcattgtgct aagtgcctca ggtataagat	660
cttgtaaggg attggttaca ttttacagat ggtaagactg ggattcagat gttagtgtcc	720
tgtttaagtc aataa	735

<210> 54
 <211> 427
 <212> DNA
 <213> Homo sapiens

<400> 54	60
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ctccatctct gtcctgattt ctacatggtg ttcttctcgt gtgcattgct gtctccaaat	120
ttccccattt tataaggaca cagtcatact ggattcgggc tcattctaaa gacctcattt	180
aatttaatto cataaagacc ctatctccaa ataattgcac attctgtggt actgggggtt	240
atgacttaaa catataaatt ttagggagac aaatttgaac ctctaacagt actgaacatc	300
caggatggaa gaacatggta ttaggttgag ccaaacacag ttgcttacgt tttggttttc	360
ctcaccagga caagaaaccc ccagtgacag aaaaattggag acatggaaaa caggggctaa	420
gtaacaa	427

<210> 55
 <211> 713
 <212> DNA
 <213> Homo sapiens

<400> 55	60
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ggttgacact ggcttctttg aaaaaaggca gtttagtaac aatggccttt actagacaga	180
catgttagaa ggcagcagga gaaagggat gtggtatcag atattttctg taaaagggtt	240
gttattaata ttcatgtggc aaattgtagc tgatgtcaaa gtagtataaa agcaaggggg	300
acacaattct tttacagcaa tggtgaggtc taagaaacat aaaaacaata cctggttaagt	360
accatgcata tatacatata taaacaatca ataactcaca aaacattcac atatttgcaa	420
cactgccttt cagtttatgc agtttatatt ttgttctttt taagcttttt attatagtga	480

atgtcttata ttctcattaaa agttttgata ttatatgtga aacaacagtt ctgataaaagc 540
 aatatctaga taaaggctat tactttacott tctcaaatg atagattttc tccttgtaac 600
 aagctctgat ataaaaatag ataatttggt gaaaactttt acacattcaa aactaaaatta 660
 tcatatattt aatgagactt tgggtgtgta tgtgtgagtg tgtgtctgtg tgt 713

<210> 56
 <211> 607
 <212> DNA
 <213> Homo sapiens

<400> 56
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 aggaaataaaa aataatatgt atgacgacaa cagtagtcta aaattcagga gacagagaat 120
 ggaagtacat tgttgcaagg ttttctaata cacatgtaca aagtggtata atgttacttg 180
 aaagataact gtgataagtt aaagacgtaa tcaatgacac tatatcaacc actaaaaataa 240
 tacaacaaag gatatacgaa atatttttaa aagtataatt aaccctaaag aaagcataga 300
 ggaaaaaagg aacaaagaat aatagatgga ataacagaa aaaactagcc agctggtaaa 360
 tttaaaaccg atcatatata tattcacatt aaatacaaaa agtttaaaaa cttcaaaagtc 420
 aagtcagagg tgtcatattg gataaaaaa aagactcaac tatatgttac ctataaggaa 480
 tgcactttaa atatacaaac atattaaaaa aaaaagatga aaagttatat acaatgttaa 540
 tactcatcaa aataaagcta atgaggctat attcataata aaaagtaggt tttaaagcaa 600
 agattac 607

<210> 57
 <211> 746
 <212> DNA
 <213> Homo sapiens

<400> 57
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 ttgtggtgaa gagcatgtgt gtgcaacacc ttgacctgaa atggatgggt ttggcattaa 120
 tgaattgttg gtccattgaa aagaaatctc ctcttggttc tegtgttatg gacagttcaa 180
 ggtttgcctt agaactaact tcaaggaaaa gtagcagaat cgtaggaaagg gacaatcttg 240
 ccttcagctc caccctctgt tccgggcagg tctgggtggc tatcttcttt cgggggcttt 300
 tctctgaga agaactcttt cagcatgtcc tggatttctt tcttaattggt cttgtgcattg 360
 tagccataga cataggggtg gatgcagcac tgcaggaaga aaagccagat gattatgggt 420
 atcaccactt ggggtacctg gggttgcaca tccaccocaa cggccaggac tgctaaaaag 480
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 ttgactgggt agcacctggg cagaggaggg ttgctgttgc tgttacgacg actgggtggg 600
 aggtctctcg ggatgttcac tgcctcgacg tcatctctac tgaaattgat gtgctcttca 660

ccaaactcca tgtcatcttc acccaagta atgctgcact ggttgacctc tgtgcgaccc 720
 ttgtctgcct tcattctgtt ctctctc 746

<210> 58 -
 <211> 638
 <212> DNA
 <213> Homo sapiens

<400> 58
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 cagttgctgt ccctggagaa cagaaaaaat aatcatggct attctgaggg tcagggggcaa 120
 gtgctttgca agtgggattg tgggtggcag tgggagggat tctgggggttc actgtcatgc 180
 tagttgtgta actgggcaat gcaaccgtgt aagtgtcagg aaaccctcaa taagactgag 240
 ccagaggcca ataagaagcc agcatttaca tgatgttctt ttcttttttg taactaggaa 300
 atttcgattt gcacactgat ttggcccacc attcctggag agatctcgtg ggaatgtctt 360
 tttgttactt tgaacttctt ggtgccagga ctggtcattg tgatcagtta ctccaaaatt 420
 ttacaggtat gttttctgca agtgcctgcca ctgaacttca ccagagcttg gggttatttc 480
 tgcataaact ttagaatttg gggtcggaga acacctaaga gttcacgccca gctcaatctt 540
 gattcactgc ccaggtctac aacactgagg aaggagagga tttttttaga agttatatct 600
 ttgtgattat gttttttgct catcactaaa gtaatact 638

<210> 59
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 59
 Asp Ala Phe Leu Phe Pro Cys Pro Glu His Gly Ser Val Met Thr Ser
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 Gly Ser Cys Lys Glu Ala Gly Leu Arg Phe Phe Gln Ala Trp Gly Glu
 20 25 30
 Val Gly Glu Glu Cys Val Leu Met Arg Arg Ala Gly Cys Ala Gly Ala
 35 40 45
 Glu Ser Ser Thr Ser Leu Gly Ser Arg Cys Pro Thr Ser Pro Ser Leu
 50 55 60
 Gln Pro Ala Leu Pro Lys Gly Ala Arg Ala Trp Pro Pro Leu Asp Met
 65 70 75 80
 Ala Ser Gln Pro Phe Gly Lys Cys Gly Arg Pro Cys Cys Arg Ala Pro
 85 90 95
 Val Thr Val Ser Val Trp Val Trp His Gly Trp Cys Ser Pro Ala Gln
 100 105 110
 Asn Pro Ala Cys Asn Ser Thr Gln Ser His Ile Pro Gly Gly Gln Ala
 115 120 125

Leu Leu Leu Cys Ser Gln Met Pro Pro Ala Gln Lys Glu Asp Thr Pro
 130 135 140

Ser Ser Ser Ala Glu Ala Ser Leu Thr Glu Gly Gly Cys Val Lys Ala
 145 150 155 160

Ser Glu Ala Glu Leu Pro Ala Ala His His Gln Asp Ala Leu Glu Ala
 165 170 175

Arg Ser Trp Ile Gly Ser Gly Cys Thr Glu Pro Ser Leu Pro Arg Asn
 180 185 190

Thr Gly Asn Ala Lys Cys Ala Gly Gln Ala Val Gly Glu Gly Gly Met
 195 200 205

Ser Leu His Val Cys Ala His Cys
 210 215

<210> 60

<211> 204

<212> PRT

<213> Homo sapiens

<400> 60

Leu Glu Lys Gly Thr Lys Ser Gly Ser Val Phe Ser Ala Phe Phe Phe
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Phe Phe Gln Ile Leu Val Val Ile Ile Gln Leu Phe Phe Leu Cys Met
 20 25 30

Asp Phe Val Val Leu Arg Ala Ile Tyr Arg Ser Arg Val Gln Leu Leu
 35 40 45

Lys Val Ile Tyr Ser Gln Phe Cys Ile Lys Pro Ile Ile Tyr Lys Cys
 50 55 60

Ile Ser Ile Gln Tyr Arg Pro Gln Arg His Lys Ile Phe Phe Ser Leu
 65 70 75 80

Leu Ser Cys Cys Pro Thr Asn Val Cys Arg Ile Tyr Gln Asn Ser Ile
 85 90 95

Arg Lys Leu Leu Val Tyr Ala Leu Leu Ala Val Leu Leu Leu Ala Phe
 100 105 110

Leu Phe Arg Val Val Glu Ile His Ser Phe Ile Asp Ile Lys Gly Thr
 115 120 125

Val Lys Met Ser Leu Pro Val Asn Ile Asn Arg Leu Val Ile Leu Gly
 130 135 140

Leu Gln Leu Asp Leu Leu Ile Cys Cys Ser Cys His Met Ser Thr Asn
 145 150 155 160

Leu Ile Cys Ser Pro Phe Gln Lys Leu Asn Tyr Leu His Phe Phe Gly
 165 170 175

Gly Ala Leu Val Trp Lys Val Arg Glu Ile Phe Thr Phe Thr Leu Phe
 180 185 190

Phe His Phe Phe Leu Lys Thr Ser Ile Pro Pro Leu
 195 200

<210> 61
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 61

Val Glu His Ser Trp Pro Cys Ile Gln Tyr Ile Ser Trp Val Arg Pro
 1 5 10 15
 Gly Val Pro Val Ser Ile Ser Val Asp Leu Leu Ser Met Leu Pro Val
 20 25 30
 Ser Thr Trp Val Val Pro Trp Gln Glu Arg Cys Ile Cys Val Leu Thr
 35 40 45
 Glu Val Pro Tyr Arg Cys His Phe His Cys Gly Ser Ser Asp Pro Gly
 50 55 60
 Lys Asp Ser Phe Gln Gly Pro Gln Val Gly Ser Gly Gly Gly Gly Ser
 65 70 75 80
 Gln Thr Pro Asp Pro Val Thr Pro Ser Arg Pro Val Leu Glu Gly Pro
 85 90 95

<210> 62
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 62

His Gln Ile Leu Leu Cys Cys Leu Arg Leu Gln His Ile Ser Met Ala
 1 5 10 15
 Ser Ser Leu Gly Met Val Thr Val Ala Glu Leu Gly Gly Phe Val Leu
 20 25 30
 Pro Ile Ile Ile Ile Thr Tyr Phe Thr Trp Lys Thr Arg Lys Ser Leu
 35 40 45
 Trp Glu Phe Gln Val Pro Pro Arg Asn Thr Lys Glu Arg Lys Lys Ala
 50 55 60
 Leu Arg Met Val Leu Met Cys Glu Val Val Phe Ile Val Cys Phe Thr
 65 70 75 80
 Pro Tyr His Leu Asn Phe Pro Phe Phe Met Met Val Lys Glu His Val
 85 90 95
 Phe Leu Asn Cys Ser Phe Ile Lys Ile Ile Leu Cys Phe His Ile Ile
 100 105 110
 Ser Leu Cys Leu Ala Asn Leu Asn Cys Cys Leu Asp Pro Val Val Tyr
 115 120
 Tyr Phe Met Thr Ser Lys Phe His Asp Gln Phe Ser Asp His Gly Ser
 130 135 140
 Leu Val Leu Gln Ser Cys Met Arg Cys Asn Asn Ser Thr Leu Glu Ile
 145 150 155 160
 His Gln Arg Lys Gly Gly Ser Ser Asn Tyr Leu Ser Met Phe Glu Arg
 165 170 175

Phe Gln Asp Asn Ile Ile Lys Leu Thr Arg Lys Ile Asp Met Leu Tyr
 180 185 190

Cys Ile Tyr Val Thr Leu Lys Ile Phe Leu Phe Phe Phe Ser Phe Phe
 195 200 205

Leu Leu Tyr Phe Lys
 210

<210> 63
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 63

Cys Tyr Cys Ser Cys Ile Leu Leu Ser Val Cys Leu Leu Cys Pro Lys
 1 5 10 15

His Arg Leu Phe Gln Lys His Phe Leu Leu Ser Pro Phe Ser Leu Ala
 20 25 30

Glu Ser His Phe Ser Val Ser Ser His Ile Ser Tyr Leu Phe Leu Leu
 35 40 45

Lys Thr Arg His Phe Arg Cys Val Val Ala Val Gln Ile Leu Ile Leu
 50 55 60

Ser Pro Arg Ser Cys Cys Leu Ser Tyr Leu Tyr Met Cys Leu Val Thr
 65 70 75 80

Trp Leu Asp Tyr Phe Asn Asn Val Tyr Phe Pro Val Val Tyr Thr Ile
 85 90 95

Phe Tyr Thr Asn Val Thr Phe Pro Ile Val Gln Pro Trp Ala Trp Thr
 100 105 110

Glu Leu Ser Trp Asp Asp Ser Asn Phe Gly Ser Leu Leu Ser Leu Ser
 115 120 125

Leu Met Ser Leu Leu Ser Tyr Leu His Leu Leu Val Ser His Leu Ala
 130 135 140

Phe Asp Phe His Leu Phe Asp His Cys Leu Thr Val Phe Gly Ser Ala
 145 150 155 160

Leu Arg His Lys Val Phe His Ser Leu Ile Leu Asn Ser Asp Ser Tyr
 165 170 175

Lys Ser Gly Leu Gly Gln Ser Leu Arg Phe Val Leu Thr Leu Gly Gly
 180 185 190

Leu Lys Cys Phe Pro
 195

<210> 64
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 64

Pro His Ile Pro Phe Pro Ser Asn Pro Gly Asn Pro Lys Leu Phe Leu
 1 5 10 15

Thr Ala Ser Phe Gly Ile Ser Ser Phe Trp Cys Gln Ile Ser Gln Gln
 20 25 30
 Asn Phe Leu Pro Ile Ile Tyr Gln Cys Leu Ser Val Lys Phe Arg Phe
 35 40 45
 Asn Phe Leu Leu Pro Arg Ala His Tyr Leu Ala Pro Ile Ile Pro Ser
 50 55 60
 Pro Asn Ser Gln Thr His Lys His Ser Leu Leu Gln Leu Trp Ala Ser
 65 70 75 80
 Tyr Leu Ser Pro Ser Gly Lys Lys Cys Cys Val Thr Pro Leu Ala Val
 85 90 95
 Ser Val Asp Leu Val Gln Gly Arg Ala Pro Val Arg Ala Ala Gly Pro
 100 105 110
 Ser Ser Leu Pro Gly His Gln Gln Ile Ser Thr Ala His Arg Cys Pro
 115 120 125
 Gly Asn Gly Ser
 130

<210> 65
 <211> 202
 <212> PRT
 <213> Homo sapiens

<400> 65

Ile Thr Ile Phe Gln Pro Leu Leu Leu Gln Gly Leu Leu Cys Thr Leu
 1 5 10 15
 Ser Leu Asn Ser Pro Ser Ile Cys Ser His Asn Pro His Asp Pro Gln
 20 25 30
 Phe Tyr Asn Thr Thr Val Arg Ser Pro Lys Leu Pro Phe Ile His Phe
 35 40 45
 His Ile Thr Ile Phe Gln Pro Leu Leu Leu Gln Gly Leu Leu Cys Thr
 50 55 60
 Leu Ser Leu Asn Ser His Asp Ser Ser Cys Thr Leu Gly Ser Ser Val
 65 70 75 80
 Ser Pro Leu Leu Leu Ile Ser Arg Val Pro Phe Cys Phe Cys Trp Leu
 85 90 95
 Pro Tyr Lys Ala Cys Asn Ile Ile Ser His Phe Arg Lys Glu Leu Asp
 100 105 110
 His Leu Leu Met Asn Pro Ala Phe Met Thr His Cys Leu Thr Cys Leu
 115 120 125
 Trp Leu Cys Met Ser Pro Ser Phe Arg Phe Phe Leu Trp Lys Glu Arg
 130 135 140
 Leu Pro Lys Ser Pro Ala His Gln His Tyr Lys Cys Met Gln Thr Ser
 145 150 155 160
 Phe Ser Cys Leu Pro Thr Leu Lys Met Ser Lys Gln Phe Ser Lys Gly
 165 170 175
 Glu Lys Ile Ser Ser Pro Pro His Thr Asn Tyr Leu His Asn Ser Val

180

185

190

Thr Phe Tyr Lys Pro Cys His Cys Ile Ser
195 200

<210> 66
<211> 221 -
<212> PRT
<213> Homo sapiens

<400> 66

Thr Val Leu Ile Met Ile Val Phe Val Ile Cys Cys Trp Gly Pro Tyr
1 5 10 15

Cys Phe Leu Val Leu Leu Ala Ala Ala Arg Gln Ala Gln Thr Met Gln
20 25 30

Ala Pro Ser Leu Leu Ser Val Val Ala Val Trp Leu Thr Trp Ala Asn
35 40 45

Gly Ala Ile Asn Pro Val Ile Tyr Ala Ile Arg Asn Pro Asn Ile Ser
50 55 60

Met Leu Leu Gly Arg Asn Arg Glu Glu Gly Tyr Arg Thr Arg Asn Val
65 70 75 80

Asp Ala Phe Leu Pro Ser Gln Gly Pro Gly Leu Gln Ala Arg Ser Arg
85 90 95

Ser Arg Leu Arg Asn Arg Tyr Ala Asn Arg Leu Gly Ala Cys Asn Arg
100 105 110

Met Ser Ser Ser Asn Pro Ala Ser Gly Val Ala Gly Asp Val Ala Met
115 120 125

Trp Ala Arg Lys Asn Pro Val Val Leu Phe Cys Arg Glu Gly Pro Pro
130 135 140

Glu Pro Val Thr Ala Val Thr Lys Gln Pro Lys Ser Glu Ala Gly Asp
145 150 155 160

Thr Ser Leu Asp Gly Trp Asn Gly Gln Leu Met Lys Ala Asn Phe His
165 170 175

Ser His Tyr Leu Met Met Glu Asp Ser Gly Gly Glu Leu Trp Ile Ser
180 185 190

Ser Gln Thr Phe Lys Ala Arg Asp Gly Gly Gly Leu Pro Leu Ser Pro
195 200 205

Asn Asn Ile Lys Asp Asn Val Pro Ser Phe Lys Lys Cys
210 215 220

<210> 67
<211> 595
<212> PRT
<213> Homo sapiens

<400> 67

Leu Glu Pro Thr Ser Lys Ala Pro Pro Gly Pro Gln Arg Pro Pro Pro
1 5 10 15

Leu Arg Pro Ser Pro Ala Pro Arg Gly Gly Arg Pro Pro Ala Pro Ser

20

25

30

His His Ser Asp Leu Ala Ala Ala Ala Pro Gly Ala Gly Gly Asp Pro
 35 40 45
 Arg Pro Pro Leu Gly Pro Met Glu Glu Pro Gln Pro Arg Pro Pro
 50 55 60
 Ala Ser Met Ala Leu Leu Gly Ser Gln His Ser Gly Ala Pro Ser Ala
 65 70 75 80
 Ala Gly Pro Pro Gly Gly Thr Ser Ser Ala Ala Thr Ala Ala Val Leu
 85 90 95
 Ser Phe Ser Thr Val Ala Thr Ala Ala Leu Gly Asn Leu Ser Asp Ala
 100 105 110
 Ser Gly Gly Gly Thr Ala Ala Ala Pro Gly Gly Gly Gly Leu Gly Gly
 115 120 125
 Ser Gly Ala Ala Arg Glu Ala Gly Ala Ala Val Arg Pro Leu Ala
 130 135 140
 Thr Glu Ala Ala Pro Leu Leu Ser His Gly Ala Ala Val Ala Ala Gln
 145 150 155 160
 Ala Leu Val Leu Leu Leu Ile Phe Leu Leu Ser Ser Leu Gly Asn Cys
 165 170 175
 Ala Val Met Gly Val Ile Val Lys His Arg Gln Leu Arg Thr Val Thr
 180 185 190
 Asn Ala Phe Ile Leu Ser Leu Ser Leu Ser Asp Leu Leu Thr Ala Leu
 195 200 205
 Leu Cys Leu Pro Ala Ala Phe Leu Asp Leu Phe Thr Pro Pro Gly Gly
 210 215 220
 Ser Ala Pro Ala Ala Ala Ala Gly Pro Trp Arg Gly Phe Cys Ala Ala
 225 230 235 240
 Ser Arg Phe Phe Ser Ser Cys Gly Ile Val Ser Thr Leu Ser Val Ala
 245 250 255
 Leu Ile Ser Leu Asp Arg Tyr Cys Ala Ile Val Arg Pro Pro Arg Glu
 260 265 270
 Lys Ile Gly Arg Arg Arg Ala Leu Gln Leu Leu Ala Gly Ala Trp Leu
 275 280 285
 Thr Ala Leu Gly Phe Ser Leu Pro Trp Glu Leu Leu Gly Ala Pro Arg
 290 295 300
 Glu Leu Ala Ala Ala Gln Ser Phe His Gly Cys Leu Tyr Arg Thr Ser
 305 310 315 320
 Pro Asp Pro Ala Gln Leu Gly Ala Ala Phe Ser Val Gly Leu Val Val
 325 330 335
 Ala Cys Tyr Leu Leu Pro Phe Leu Leu Met Cys Phe Cys His Tyr His
 340 345 350
 Ile Cys Lys Thr Val Arg Leu Ser Asp Val Arg Val Arg Pro Val Asn
 355 360 365

Thr Tyr Ala Arg Val Leu Arg Phe Phe Ser Glu Val Arg Thr Ala Thr
370 375 380

Thr Val Leu Ile Met Ile Val Phe Val Ile Cys Cys Trp Gly Pro Tyr
385 390 395 400

Cys Phe Leu Val Leu Leu Ala Ala Ala Arg Gln Ala Gln Thr Met Gln
405 410 415

Ala Pro Ser Leu Leu Ser Val Val Ala Val Trp Leu Thr Trp Ala Asn
420 425 430

Gly Ala Ile Asn Pro Val Ile Tyr Ala Ile Arg Asn Pro Asn Ile Ser
435 440 445

Met Leu Leu Gly Arg Asn Arg Glu Glu Gly Tyr Arg Thr Arg Asn Val
450 455 460

Asp Ala Phe Leu Pro Ser Gln Gly Pro Gly Leu Gln Ala Arg Ser Arg
465 470 475 480

Ser Arg Leu Arg Asn Arg Tyr Ala Asn Arg Leu Gly Ala Cys Asn Arg
485 490 495

Met Ser Ser Ser Asn Pro Ala Ser Gly Val Ala Gly Asp Val Ala Met
500 505 510

Trp Ala Arg Lys Asn Pro Val Val Leu Phe Cys Arg Glu Gly Pro Pro
515 520 525

Glu Pro Val Thr Ala Val Thr Lys Gln Pro Lys Ser Glu Ala Gly Asp
530 535 540

Thr Ser Leu Asp Gly Trp Asn Gly Gln Leu Met Lys Ala Asn Phe His
545 550 555 560

Ser His Tyr Leu Met Met Glu Asp Ser Gly Gly Glu Leu Trp Ile Ser
565 570 575

Ser Gln Thr Phe Lys Ala Arg Asp Gly Gly Gly Leu Pro Leu Ser Pro
580 585 590

Asn Asn Ile
595

<210> 68

<211> 201

<212> PRT

<213> Homo sapiens

<400> 68

Ala Ser Ala Ser Gln Ala Gln Phe Lys Lys Lys Met Phe Asn Leu Leu
1 5 10 15

Leu Thr Tyr Phe Cys Lys Ile Leu Lys Ile Tyr Thr Ile Tyr Trp Leu
20 25 30

His Asn Ile Val Lys Ala Leu Thr Ala Thr Lys Leu Tyr Ala Gln Lys
35 40 45

Trp Leu Lys Trp Tyr Ile Tyr Ile Thr Tyr Ile Leu Leu Gln Phe Val
50 55 60

Ile Glu Lys Asn Glu Met Lys Lys Val Lys Phe Gln Pro Gln Leu Cys

65					70					75					80					
Phe	Asn	Asn	Ile	Gln	85	Asp	Leu	Val	Lys	90	Leu	Lys	Phe	Leu	Asn	Ala	95			
Tyr	Phe	Gln	Phe	Leu	100	-	Tyr	Leu	Ser	Arg	105	Cys	Arg	Pro	Val	Lys	Val	Cys	110	
Met	Leu	Ala	Ala	Ile	115	Pro	Glu	Leu	Tyr	120	Phe	Asp	Ser	Thr	125	Asp	Leu	Ser		
Cys	Gly	Glu	Gly	Leu	130	Trp	Leu	Cys	Arg	Ala	135	Ser	Gln	Glu	Thr	140	Phe	Glu	His	
Lys	Val	Ser	Cys	Thr	145	Thr	Thr	Thr	Pro	Ser	Ser	Arg	His	Phe	Trp	Thr	Pro	150	160	
Gly	Trp	Ser	Thr	Pro	165	Ser	Ser	Ser	Gly	Gln	Ala	His	Cys	Ser	Ser	Asp	Val	175		
Trp	Leu	Thr	Pro	180	Thr	Tyr	Ala	Pro	Ala	185	Val	Pro	Gln	Gly	Pro	190	Cys	Cys		
Thr	Val	Val	Phe	Ile	195	Tyr	Phe	Leu	Arg	200										

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<210> 69
<211> 217
<212> PRT
<213> Homo sapiens
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<400> 69

Arg	Leu	Lys	His	Ile	Leu	Pro	Ser	Ser	Leu	Arg	Leu	Ala	Ser	Lys	Asn
1			5						10					15	
Ala	Phe	Asn	Trp	Leu	Asn	Leu	Arg	Ile	Ile	Val	Tyr	Cys	Cys	Leu	Gly
			20					25					30		
Ile	Ile	Glu	Cys	Cys	Leu	Leu	Ile	Lys	Val	Glu	Phe	Asp	Pro	Pro	Arg
		35					40					45			
Leu	Pro	Leu	Val	Trp	Val	Gly	Glu	Gly	Leu	Gly	Phe	Cys	Ser	Phe	Phe
		50				55					60				
Phe	Leu	Leu	Leu	Ile	Arg	Ser	Thr	Asn	Ile	Tyr	Cys	Met	Pro	Met	Gly
65				70						75					80
Gly	Lys	His	Arg	Phe	Cys	Gly	Ala	Ser	Leu	Tyr	Tyr	Leu	Gly	Asp	Pro
			85					90					95		
Leu	Ile	Lys	Leu	Ile	Lys	Leu	Gln	Ile	Gln	Asn	Ala	Lys	Leu	Phe	Leu
			100				105						110		
Arg	Met	Gln	Ile	Glu	Gly	Thr	Leu	Gln	Leu	Lys	Asp	Tyr	Ser	Leu	Tyr
		115				120						125			
Asn	Lys	Tyr	Ala	Ser	Gly	Ala	Tyr	Cys	Met	Ser	Gly	Thr	Leu	Gly	Pro
		130				135					140				
Val	Asp	Lys	Val	Met	Asn	Ala	Ile	Val	Thr	Leu	Thr	Trp	Ile	Leu	Gln
145					150					155					160
Ser	Ser	His	Phe	Gln	Lys	Met	Val	Ser	Leu	Phe	Val	Pro	Pro	Gln	Arg
			165					170						175	

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Gly Thr Asn His Ser Ser Pro Leu Trp Lys Trp Leu Leu Ser His Lys
 65 70 75 80
 Tyr Ser Pro Ser Cys Ser Arg Leu Leu Ile Leu Asn Leu Trp Val Asn
 85 90 95
 Lys Val Thr His Leu Tyr Lys Glu Ile Gly Asp Gln Ser Asn Ser Pro
 100 105 110
 Ile Arg Lys Pro Gln Arg Val Gly Thr Asn Ser Val Met His Leu Glu
 115 120 125
 Leu Glu His Thr Cys Ser Asn Leu Gln Ser Gly Lys Leu Ile Val Leu
 130 135 140
 Trp Trp Leu Lys Lys Gln Arg Gly Thr Gly Ser Ala Glu Lys Pro Met
 145 150 155 160
 Asn Lys Pro Pro Val Pro Tyr Gly Phe Phe Leu Lys Ser Glu Phe Arg
 165 170 175
 Ala Gln Asn Glu Ser Ile Tyr Leu Val Leu Thr His Ser Ile Lys Asn
 180 185 190
 Glu Glu Thr Gly Ala Glu Leu Leu Lys Asn Ile Pro Val Ser Cys Lys
 195 200 205
 Ala Arg Thr Gly His Pro Tyr Val Leu Thr Leu Pro Cys
 210 215 220
 <210> 72
 <211> 237
 <212> PRT
 <213> Homo sapiens
 <400> 72
 Leu Pro Ser Gln Gly Glu Gly Arg Ala Pro Lys Gly Leu Met Arg Gly
 1 5 10 15
 Leu Thr Asp Gln Gly Arg Glu Gln Asn Thr Phe Leu Ser Ile Gly Asp
 20 25 30
 Ser Val Thr Trp Leu Ser Leu Ile Ile Ser Glu Ala Trp Arg Ile His
 35 40 45
 Leu Phe Val Ser Pro Gly Arg Arg Glu Asn Lys Leu Trp Thr Phe Ser
 50 55 60
 Ser Leu Tyr Asp Asn Ser Leu Tyr Val Asp Cys Lys Gly Gly Thr Lys
 65 70 75 80
 Pro Ser Leu Leu Ser Asn Thr Ile Trp Gln Ser Pro Trp Val Ile Ile
 85 90 95
 Leu Asn Ile Asp Ala Tyr Cys Ser Arg Val Lys Lys Ile Ser Met Thr
 100 105 110
 Ala Phe Gln Phe Tyr Lys Phe Asn Leu Tyr Ser Ala Tyr Cys His Pro
 115 120 125
 His Val Leu Lys Asn Lys Ile Lys Asn Lys Lys Pro Ser Asn Tyr Val
 130 135 140

Leu Tyr Ser Lys Glu His Ser Tyr Ile Ser Leu His Cys Ile Leu Thr
145 150 155 160

Thr Ile Leu Cys Ser Ile Cys Phe Thr Pro Phe Leu Leu Cys Phe Val
165 170 175

Tyr Lys Glu Met Ser Pro Arg Glu Leu Asn Gly Leu Pro Gln Leu Val
180 185 190

Lys Leu Lys Leu Gln Ser Arg Ser Phe Tyr Phe Gln Ile His Asn Leu
195 200 205

Gln Pro Ser Val Glu Ser Tyr Asn Glu Ile Met Val Arg Gly Leu Ser
210 215 220

Ile Ser Val Gln Val Cys Pro Ala Pro Thr Thr Ser Ile
225 230 235

<210> 73

<211> 224

<212> PRT

<213> Homo sapiens

<400> 73

Ser Val His Cys Tyr Gln Glu Asn Asn Ala Phe Ser Gly Ser Leu Ile
1 5 10 15

Leu Asn Thr Leu Ala Gly Asn Leu Leu Ala Arg Thr Gly Asp Leu Ile
20 25 30

Ile Ser Ser Trp Met Arg Leu Trp Gly Gly Arg Ile Leu Thr Gly Tyr
35 40 45

Thr Ala Ala Gln Thr Arg Val Ala Leu Gly Arg Arg Glu Gly Glu Asn
50 55 60

Trp Val Asn Pro Met Met Pro Val Met Thr Asp Val Gly Leu Leu Asn
65 70 75 80

Lys Phe Ser Ser Gln Lys Leu Met Ile Phe Thr Ile Pro Ile Trp Ile
85 90 95

Ser Tyr Gly Glu Ile Gln Val Trp Leu His Ser Phe Ser Leu Ser Ile
100 105 110

His Thr Leu Ile His Tyr Leu Leu Glu Ala Asn Phe Val Pro Gly Leu
115 120 125

Val Arg Tyr Gly Val Thr Ser Cys Thr Lys Gln Pro Gly Ser Leu Gly
130 135 140

Pro Thr Val Gly Lys Gln Gly Lys Cys Gly Arg Ile Ile Lys Ile Thr
145 150 155 160

His Thr Ala Pro Arg Trp Gln Gly Lys Cys His Phe Phe Tyr Phe Leu
165 170 175

Leu Met Asp Leu Arg Leu Phe Trp Phe Gln Trp Ser His Phe Ser Leu
180 185 190

Ser Ile Gln Phe Ile Gln Asn Ser Phe Ala Ser Asp Lys Ile Ala Asn
195 200 205

Trp Leu Pro Ala Asn Ser Phe Ser Pro Gln Ser Met Gly Asn Ala Gly

210

215

<210> 74
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 74

Leu Leu Leu Leu Lys Val Ile Ala Phe Arg Leu Phe Gln Leu Gln Ser
 1 5 10 15
 Lys Glu Val Tyr Val Tyr Ile Val Ile Cys Glu Tyr Thr His Thr Tyr
 20 25 30
 Thr Tyr Phe Tyr Met Ser Ser Ile Phe Lys Leu Ser Arg Ile Val His
 35 40 45
 Thr Asp Ile Ser Asn Pro Asn Gln Leu Pro Gln Gly Leu Phe Arg Pro
 50 55 60
 Phe Ser Leu Gly Ser Leu Gln Leu Leu Leu Gln Gln Leu Glu Ile Trp
 65 70 75 80
 Leu Pro Tyr Ser Phe Ala Leu Phe Asn Ser Ser Thr His Lys Trp Trp
 85 90 95
 Leu Gln Asn Leu Ile Pro Pro Trp Glu Ile Thr Leu Leu Thr Lys Val
 100 105 110
 Gln His Leu Cys Ile Val Leu Phe Glu Phe Leu Asp Leu Glu Ile Pro
 115 120 125
 Leu Leu Phe Gln Ser Tyr Leu Gly Gln Asn His Phe Pro Phe Phe Ser
 130 135 140
 Glu Val Val Leu Cys Ile Cys Asn Thr Val Arg Leu Phe Cys His Met
 145 150 155 160
 Val His Ser Ile Leu Gly Phe Pro Ile Ser Phe Phe Asn Ile Cys Ile
 165 170 175
 Tyr Val Ser Phe Phe Cys Ala Val Ser Phe Tyr Gly Phe Gln Leu Met
 180 185 190
 His Ser Val Met Asn Leu Pro Pro Glu His His Thr Glu Phe His Gln
 195 200 205
 Leu Lys Lys Phe Pro Met Phe Tyr
 210 215

<210> 75
 <211> 204
 <212> PRT
 <213> Homo sapiens

<400> 75

Phe Leu Pro Leu Cys His Asn Gly His Asp Asp Ser Trp Leu Thr Gln
 1 5 10 15
 Thr Phe Cys Val Trp Lys Asp Leu Ile Cys Pro Phe Leu Glu Ala Thr
 20 25 30
 Ile Leu Arg Phe Glu Lys Ser Phe Leu Lys Asn Lys Ile Phe Leu Ile

35

40

45

Lys Asn Asn Ala Ser Ser Leu Glu Lys Asn Lys Ile Asn Lys Ser Thr
 50 55 60
 Ile Phe Leu Asn His Leu Lys Met Thr Ile Val Ser Phe Phe Phe Phe
 65 70 75 80
 Leu Val Leu Phe Ser Val Ser Asn Leu Phe Ser Ile Lys Thr Ser Glu
 85 90 95
 Met Leu Gln Arg Ile Arg Gly Pro His Ile Glu Lys Phe Ile Asn Thr
 100 105 110
 Leu Ala Ser Cys Leu Ala Phe Val Pro Ser Leu Thr Gly Asn Ser Phe
 115 120 125
 Ser Ile Ser Leu Lys Leu Gln Ile Leu Asp Asn Ser Ser Arg Ser Ser
 130 135 140
 Ser Asn Val Leu Leu Asp Ser Ser Gln Gln Glu Leu Ile Tyr Phe Leu
 145 150 155 160
 Cys Ile Phe Val Pro Gln Asp Leu Leu Ser Tyr Gly Asn Tyr His Leu
 165 170 175
 Leu Pro Tyr Ile Thr Ile Phe Glu Ser Ser Asn Lys Val Phe Phe Phe
 180 185 190
 Phe Gln Met Lys Ser Arg Tyr Ile Ala Gln Ala Gly
 195 200
 <210> 76
 <211> 228
 <212> PRT
 <213> Homo sapiens
 <400> 76
 Val Met Gly Asn Ala Arg Ile Cys Val Gln His Gly Arg Glu Ser Val
 1 5 10 15
 Trp Lys Ser Phe Asp Lys Leu Trp His Leu Ser Leu Thr Leu Pro Gln
 20 25 30
 Asn Phe Arg Leu Pro Ala Ile Tyr Lys Leu Glu Val Lys Ile Thr Ser
 35 40 45
 Met Tyr Thr Ser Gln His Lys Glu Ser Tyr Pro Ser Phe Leu Asp Gly
 50 55 60
 Ala Arg Ile Trp Val Arg Phe Ile Val Gln Ser Ser Ser Leu Phe Tyr
 65 70 75 80
 Arg Pro Gly Phe Lys Phe Thr Ser Lys Met Glu Asn Phe Gly Trp Glu
 85 90 95
 Asn Tyr Met Trp Glu Asp Ile Phe Ser Gly Asp Phe Ser Asn Tyr Ser
 100 105 110
 Phe Ser Tyr Asp Pro Thr Pro Phe Leu Leu Asp Ser Ala Pro Cys Trp
 115 120 125
 Pro Glu Ser Leu Glu Ile Asn Tyr Val Leu Ile Ile Tyr Ala Leu
 130 135 140

Met Phe Leu Leu Asn Val Met Asn Ser Leu Pro Met Leu Val Ile Leu
145 150 155 160

Phe Ser Val Ser His Cys His Arg Cys Leu Pro Ala Asp Pro Gly Leu
165 170 175

Gly Arg Pro Val Leu Phe Pro Asp Ile Ala His Leu Gly Cys Leu Gln
180 185 190

Glu Met Ala Gly Ile Phe Gly Thr Ile Cys Ala Arg Trp Ser Ser Ser
195 200 205

Arg Lys Ser Thr Ser Thr Gly Gly Ile Leu Leu Leu Ala Cys Arg Ser
210 215 220

Met Gly Leu Leu
225

<210> 77

<211> 220

<212> PRT

<213> Homo sapiens

<400> 77

Val Leu Thr Thr Ser Thr Val Phe Leu Lys Gln Asn Cys His Leu Leu
1 5 10 15

Glu Arg Lys Ile Tyr Gly Glu Ser Pro Ser Ser Ser Leu Thr Pro Glu
20 25 30

Lys Ala Trp Ile Lys Asn Ser Arg Gln Pro Trp Arg Leu Ser Leu Leu
35 40 45

His Gly Thr Met His Pro Trp Gly Arg Gln Lys Met Glu Lys Cys Ile
50 55 60

Ile Ile Lys Cys Leu Leu Cys Thr Arg Ser Gln His Phe His Met Tyr
65 70 75 80

Ser His Pro Ala Pro Phe His Ile Cys Ser His Phe Pro Asp Glu Gly
85 90 95

Thr Glu Ile Pro Arg Arg Glu Val Thr Ser Gly Gln Ser Trp Asp Leu
100 105 110

His Thr Ala Arg Lys Ser Thr Ala Asp Ile Asp Cys Val Leu Pro Leu
115 120 125

Cys Gln Leu Leu Phe Glu Gly Val Ser Arg Phe Gln Leu Ile Phe Ser
130 135 140

Gln Lys Cys His Gly Asp Asp Glu Glu Thr Glu Ala Lys Tyr Leu Ala
145 150 155 160

Val Ala Gln Leu Pro Asp Asp Gly Val Arg Ile Gln Tyr Trp Gln Cys
165 170 175

Trp Val Gln Ser Gln Val Leu Leu Thr Leu His Pro Val Cys Tyr Pro
180 185 190

Leu Ser Thr Ala Ser Gln Arg Lys Thr Tyr Thr His Gly Ala Phe Met
195 200 205

Leu Phe Gly Asn Val Gln His His Gly Asn Ile Ile
 210 215 220

<210> 78
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 78

Lys Ile His Ser Ala Ala Gly Arg His Arg Ala Phe Ser Thr Cys Ser
 1 5 10 15

Ser His Leu Thr Val Val Leu Leu Gln Tyr Gly Cys Cys Ala Phe Met
 20 25 30

Tyr Leu Cys Pro Ser Ser Ser Tyr Asn Pro Lys Gln Asp Gln Phe Ile
 35 40 45

Ser Leu Val Tyr Thr Leu Gly Thr Pro Leu Leu Asn Pro Leu Ile Tyr
 50 55 60

Ala Leu Arg Asn Ser Glu Met Lys Gly Ala Val Gly Arg Val Leu Thr
 65 70 75 80

Arg Asn Cys Leu Ser Gln Asn Ser Glu Arg Gly Asp Ser Leu Ser
 85 90 95

Gly Lys Tyr Leu Val Pro Ala His Gln Ile Cys Met Lys Leu Arg Phe
 100 105 110

Leu Ser Phe Gly Val Lys Thr His Leu Lys Asp Gly Ile Asn Tyr Met
 115 120 125

Asp Thr Val Tyr Val Cys Gln Arg Phe Leu Asn Ile Ser Thr Ile Leu
 130 135 140

Cys Asn Phe Ser Ser Trp Lys Glu Leu His Glu His Lys
 145 150 155

<210> 79
 <211> 227
 <212> PRT
 <213> Homo sapiens

<400> 79

Ile Lys Ile Arg Leu Gly Leu Lys Leu Ser Leu Pro Leu Ser Arg Glu
 1 5 10 15

Met Lys Cys Thr Leu Ser Thr Ile Leu Ile Leu Lys Leu Phe Lys Lys
 20 25 30

Cys Phe Arg Asp Ser Leu Pro Asp Lys Leu Ala Met Asn Phe Gln Pro
 35 40 45

Thr Arg Ala Phe Ile Tyr Ile Arg Gly Val Gln Glu Phe Arg Gln Leu
 50 55 60

Phe Thr Leu Lys Lys Ile Leu Ile Val Lys Thr Thr Lys Val Asp Gln
 65 70 75 80

Leu Ile Leu Phe Leu Trp Leu Leu Val Phe Ser Lys Val Leu Ile Leu
 85 90 95

Leu Tyr Leu Ala Val Ser Lys Phe Gln Lys Cys Phe Cys Thr Asp Trp
 100 105 110

Pro His Phe Lys Phe Ser Ile Gly Asn Phe Lys Trp Val Leu Met Leu
 115 120 125

Pro Gly Val Leu Gly Leu Ile Leu Asp Phe Ser Val Phe Ser Leu Ser
 130 135 140

Cys Phe Phe Met Thr Ile Leu Cys Leu Pro Ser Leu Leu Lys Phe Pro
 145 150 155 160

Lys Asp Val Phe Tyr His Pro His Ala Gln Leu Met Asn Leu Ser Ser
 165 170 175

Tyr Phe Ala Glu Ile Met Arg Ala Ile Arg Ser Ser His His Cys Ser
 180 185 190

Trp Gly Ile Ile Cys Leu His Phe Gln Gln Arg Pro Cys Ser Ser Pro
 195 200 205

Arg Pro Thr Leu Leu Ala Trp Ala Ala Ile Thr Glu His His Arg Leu
 210 215 220

Gly Gly Leu
 225

<210> 80

<211> 164

<212> PRT

<213> Homo sapiens

<400> 80

Ser Leu Ser Ser Arg Gly Ser Glu Ala Gln Asn Cys Leu Glu Ile Cys
 1 5 10 15

Pro Ser Ser Asp Thr Glu Leu Met Leu Glu Arg Glu Pro Asn Leu Phe
 20 25 30

His Leu Asn Ser Cys Gly Lys Met Asn Thr Asn Cys Phe Leu Tyr Tyr
 35 40 45

Asp Asn Lys Lys Leu Ser Ser Ile Phe Leu Tyr Lys Lys Ala Ile His
 50 55 60

Met His Gln Ser Gly His Leu Leu Val Thr Phe Phe Pro His His Phe
 65 70 75 80

Thr Thr Phe His Phe Thr Thr Cys Cys Leu Asn Pro Leu Ile His Phe
 85 90 95

Phe Lys Lys Glu Asn Glu Phe His Tyr Tyr Gln Thr Pro Gly Ser Ser
 100 105 110

Cys Asp Gln Leu Phe Leu Val Val Lys Cys Cys Pro Glu Thr Lys Val
 115 120 125

Asn Leu Ser Val Leu Leu Cys His Asn Arg Thr Phe Pro Val Arg Arg
 130 135 140

Glu Cys Gly Arg Phe Gly Val Asn Pro Gly Met Gly Gln Gly Arg His
 145 150 155 160

Lys Ser Arg Asn

<210> 81
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 81

Leu Glu Phe Tyr Ser Lys His Gln Ser Arg Gly Ile Val Arg Glu Arg
 1 5 10 15
 Asn Met Leu Ile Gln Asp Ser Gly Ser Leu Phe Phe Ser Ser Phe Phe
 20 25 30
 Ser Gln Asn Asp Leu Asp Ser Cys Lys Val Leu Val Tyr Leu Val Ser
 35 40 45
 Lys Ser Leu Phe Leu Leu Asn Phe Ile Cys Ile Asn Gln Leu Tyr Met
 50 55 60
 Thr Lys Met Ser Pro Lys Phe Lys Ser Leu His Ser Lys Ala Leu Tyr
 65 70 75 80
 Val His Leu Ala Ser Phe Gln Lys Thr Lys Ala Val Val Leu Lys Phe
 85 90 95
 Ser Cys Thr Leu Ile Thr Gly Lys Leu Phe Lys Leu Leu Met Thr Lys
 100 105 110
 Pro His Val Arg Leu Ile Tyr Ala Glu Ser Leu Gly Gln Gly Pro Arg
 115 120 125
 Tyr Gln His Phe Leu Lys Leu Arg Asn Asn Gln Gly Glu Pro Leu His
 130 135 140
 Lys Met Val Asn Ala Thr Phe Ile Val Ile Phe Phe Lys Ile Met Val
 145 150 155 160
 Glu Leu Ile Leu Ile Leu Val Pro Ser His Gly Asn Phe Phe Arg Leu
 165 170 175
 Arg Glu Phe Ile Leu Ala Leu Arg Leu Lys Asn Leu Glu Ile Gln
 180 185 190
 Val Phe Leu Phe Ile Phe Phe Leu Ile Leu Glu Tyr Ala Ser Ala His
 195 200 205
 Pro Tyr Leu Ile Ile Leu Glu Lys Tyr Ile Lys Thr Phe
 210 215 220

<210> 82
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 82

Ile Ile Ile Met Leu Ile Leu His His Ile Gln Ile Asp Cys Asn Ile
 1 5 10 15
 Val Ile Cys Asn Ile Leu Phe Lys Ile Asn Leu Ser Glu Ser Tyr Ile
 20 25 30
 Ala Thr Val Val Ser Leu Ile His Arg Phe Ile Phe Tyr Gly Phe Ser

35

40

45

Tyr Leu Leu Ser Thr Arg Ile Gln Gln Tyr Tyr Met Gly Lys Ser Gln
50 55 60

Lys Thr Val Cys Lys Phe Phe Val Arg Cys Ser Gly Gln Arg Asp Lys
65 70 75 80

Ile Ser Cys Cys Ser Ser Leu Ser Cys Leu Asn Met Asn Tyr Pro Leu
85 90 95

Ser Ser Ile Ser Thr Leu His Met Leu Pro Ser His Ser Ser Phe Ser
100 105 110

Ser Cys Phe Asp Tyr Leu Ile Glu Lys Thr His Ser Ile Tyr Arg Val
115 120 125

Phe Tyr Gly Ala Arg Glu Asn Phe Leu Phe Val Leu Arg Phe Thr Glu
130 135 140

Asn Ser Thr His Lys Gly Arg Leu Ile Gly Met Lys Val Lys Lys Lys
145 150 155 160

Ile Tyr His Gln Trp Arg Leu Gln Ser Asp Tyr Ser Ile Ala Ile Asn
165 170 175

Gly Leu Gln Trp Leu Lys Tyr Arg Phe Glu Val Thr Lys Arg Val Glu
180 185 190

Val Leu Gly Ser Trp Gln Asn Arg Leu Trp Glu Glu Glu Lys Arg Asn
195 200 205

Pro Gly Gln Arg Ser Ser Cys Asp
210 215

<210> 83

<211> 118

<212> PRT

<213> Homo sapiens

<400> 83

Phe Phe Pro Leu Ser Val Ser Leu Met Leu Ser Ser Lys Trp Arg Trp
1 5 10 15

Arg Gly Phe Thr Ser Leu Phe Ser Asn Ser Pro Phe Phe Gly Phe Phe
20 25 30

Ser Ser Thr Ser Lys Ser Val Gln Asn Val Pro Leu Ala His Arg Lys
35 40 45

Ser Phe Leu Asp Pro Ala Thr Tyr Leu Thr Lys Ile Pro His Phe Ser
50 55 60

Ser Ser Phe Lys Ile Ser Phe Ile Met Val Cys Val Asn Gly His Ile
65 70 75 80

His Leu Ile His Ser Phe Leu Lys Phe Gln Lys Asn Gly Phe Val Ser
85 90 95

Cys Tyr Phe Asn Gly Ile Ile Phe Pro Lys Ile Asn Arg Thr Phe Pro
100 105 110

Gln Ala Gln Ser Ser Arg
115

<210> 84
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 84

Ile Glu Ile Ile Cys Thr Leu Leu Pro Leu Glu Asn Asn Glu Lys Leu
 1 5 10 15
 Gly Ile Ser Gln Cys Tyr Leu Leu Val Ala Ser Gly Ile Lys His Asn
 20 25 30
 Gln Asn Gly Ser Gly Gln Cys Thr Pro His Phe Lys Ala Cys Asn Ser
 35 40 45
 Glu Val Glu Pro Arg His Leu Pro Leu Val Val Tyr Ser Val Tyr Leu
 50 55 60
 Ile Asp Ser Pro Lys Cys Lys Leu Leu Ile Asn Arg Ala Tyr Val Arg
 65 70 75 80
 Ser Pro Val Met Cys Leu Ile Leu Ser Asp Val Cys Ser His His Thr
 85 90 95
 Ser Phe Gly Val Cys Asn Ser Phe Val Cys Gly Phe Phe Cys Leu Val
 100 105 110
 Ile Leu Val Cys Pro Val Cys Phe Tyr Gly Arg Val Trp Arg Asn Ser
 115 120 125
 Lys Ala Ile Pro His Cys Pro Ser Ser Phe Pro Trp Ile His Val Pro
 130 135 140
 Tyr His Val
 145

<210> 85
 <211> 202
 <212> PRT
 <213> Homo sapiens

<400> 85

Thr Ser Leu Cys Ala Ser Val Ala Lys Ser Met Arg Ala Gly Lys Thr
 1 5 10 15
 Cys Ile Leu Ser Cys Ile Cys Ile Gln Met Leu Asp Pro His Leu Cys
 20 25 30
 Pro Val Gln Tyr Leu Ser Leu Leu Leu Gln Trp Val Thr Asn Glu
 35 40 45
 Pro Cys Leu Pro Ala Trp Gly Arg Arg Gly Leu Arg Asp Ile Ser Thr
 50 55 60
 Gly Ile Phe Gly Val Ser Arg Leu Glu Arg Asn Leu Leu Ile Ser Thr
 65 70 75 80
 Leu Tyr Asn Tyr His Asn Ile Leu Phe Leu Met Lys Gln Gln Phe Thr
 85 90 95
 Phe Leu Cys Trp Leu Tyr Phe Ala Ser Phe Thr Trp Gln Tyr Leu Met
 100 105 110

Pro Ser Leu Gly Ile Arg Arg Lys Thr Arg Pro Gln Ile Pro Gly Pro
115 120 125

Ser Thr Leu Phe Leu Leu Gly Thr Ser Phe Thr Ser Ser Ser Ala Asp
130 135 140

Ala Pro Leu Leu Pro Thr Pro Pro Arg Lys Val Ser Ser Gln Gln Ala
145 150 155 160

Leu Thr Lys Gly Ser His Phe Leu Pro Lys Gly Glu Ser Ser Gln Ala
165 170 175

Val Asn Phe Ser Ser Asn Phe Cys His Cys Ser Ser Val Ala Asp Leu Pro
180 185 190

Ser Ser Leu Ser Trp Arg Ile Leu Pro Gly
195 200

<210> 86

<211> 189

<212> PRT

<213> Homo sapiens

<400> 86

Leu Asn Ala Thr Pro Phe Ser Ser Glu Thr Leu Trp Cys Ile Leu Gly
1 5 10 15

His Tyr Leu Ser Lys Gly Pro Lys Leu Asn Ser Ser His His Pro Ser
20 25 30

Phe Phe Cys Leu Arg Phe Tyr Phe Pro Asn Gln Ile Trp Val Asn Phe
35 40 45

Gln Pro Leu Ser Val Ser Tyr Phe Gln Ser Asn Lys Thr Cys Met Asp
50 55 60

Leu Phe Cys Ile Ser Ser Asn Val Ile Ile His Ser Lys Ser His Cys
65 70 75 80

Leu Thr Ile Ser Leu Pro Ile Ala Leu Ala Ile Lys Lys Leu His Trp
85 90 95

His Gly Phe Gln Thr Cys Ile Leu Phe Phe Gly Gly Leu Ile Leu Asn
100 105 110

Leu Lys Tyr Leu Arg Ile Ser Asn Thr Ile Phe Lys Met Gln Gln Ile
115 120 125

Phe Lys Thr Ala Ser Leu Cys Gln Ala Lys Gly Val Ser Cys Gln Leu
130 135 140

Ser Leu Thr Ala Lys Glu Ala Lys Ile Ile Leu Met Val Val Leu Lys
145 150 155 160

Glu Ala Ser Ala His Phe Leu Gly Gln Cys His Pro Thr His Leu Leu
165 170 175

Gln Gly Leu Asp Thr Lys Gly Asp Val Ser Asp Phe Pro
180 185

<210> 87

<211> 191

<212> PRT

<213> Homo sapiens

<400> 87

Asn Arg Lys Asn Leu Lys Ile Ser Thr Val Phe Asn Gln Phe Phe Ser
 1 5 10 15

Leu Leu Pro Val Leu Trp His Asn Ile Val Leu Asn Trp Lys Asn Thr
 20 25 30

Met Leu Ala Phe Thr Tyr Met Ser Ile Leu Ile Leu Ser Arg Cys Leu
 35 40 45

Val Ser Pro Tyr Leu Lys Leu Leu Leu Ile Ile Leu Phe Cys Ser Leu
 50 55 60

Tyr Val Leu Trp Ala Asn Lys Ser Tyr Pro Pro Asn Lys Leu Thr Phe
 65 70 75 80

Lys Lys Phe Ala Lys Asp Trp Leu Pro Ile Ser Leu Tyr Leu Leu Ile
 85 90 95

Pro Phe Lys Ala Lys Tyr Cys Phe Ala Thr Ile Leu Leu Leu His Tyr
 100 105 110

Thr Glu Leu Pro Ala Leu Phe Ser Ala Lys Trp Lys Ala Tyr Phe Ser
 115 120 125

Lys Ser Tyr Val His Leu Leu Leu His Asp Ile Asn Lys His Asn Thr
 130 135 140

Ser Ile Thr His Phe Thr Asn Ala Arg Leu Ala Lys Asn His Thr Tyr
 145 150 155 160

Lys Trp Pro His Leu Leu Tyr Pro His Pro Gly His Val Leu Ser Leu
 165 170 175

Pro Trp Lys Pro Met Glu Lys Leu Arg Thr Leu Glu Arg Met Trp
 180 185 190

<210> 88

<211> 194

<212> PRT

<213> Homo sapiens

<400> 88

Lys Lys Phe Leu Arg Glu Gln Ile Cys Asp Phe Ile Met Ser Phe Ile
 1 5 10 15

Met Phe Cys Ser Phe Gln Ile Gln Met Ser Ile Ile Cys Phe Tyr Asp
 20 25 30

Gln Ser Ile Ile Pro Cys Lys His Ile Ser Ala Leu Ile Leu Phe Leu
 35 40 45

Asn Asn Thr Gly Asn Val Ile Cys Cys Lys Leu Leu Thr Phe Val Arg
 50 55 60

Lys Phe Cys Phe Thr Glu Tyr Val Arg Cys Arg Gln Asn Ile Asn His
 65 70 75 80

Cys Phe Ile Phe Met Val Glu Glu Lys Ser Ile Ala Cys Ser Pro Phe
 85 90 95

Ala Val Tyr Lys Gly Glu Phe Tyr Cys Leu Asn Ser Phe Ile Phe Trp
 100 105 110

Pro Val Gln Glu Thr Phe Ile Ser Lys Ile Trp Met Tyr Val Phe His
 115 120 125

Ile Leu Glu Phe He Val Trp Lys Asn Thr Ile Lys Val Asp Gln Lys
 130 135 140

Ile Leu Lys Ile Leu Thr Ser Cys Leu Ser Tyr Val Lys Val Leu Trp
 145 150 155 160

Leu Ile Leu Phe Ile Leu Ser Cys Ser Leu Ala Gly Tyr Trp Gln Thr
 165 170 175

Gln Ser Phe Cys Phe His Lys Glu Leu Met Lys Arg Thr Ile Gly Lys
 180 185 190

Pro Thr

<210> 89

<211> 218

<212> PRT

<213> Homo sapiens

<400> 89

Gln Ser Gln Pro Ser Leu Pro Gly Ser Met Gly Asp Glu Leu Ala Pro
 1 5 10 15

Cys Pro Val Gly Thr Thr Ala Trp Pro Ala Leu Ile Gln Leu Ile Ser
 20 25 30

Lys Thr Pro Cys Met Pro Gln Ala Ala Ser Asn Thr Ser Leu Gly Leu
 35 40 45

Gly Asp Leu Arg Val Pro Ser Ser Met Leu Tyr Trp Leu Phe Leu Pro
 50 55 60

Ser Ser Leu Leu Ala Ala Ala Thr Leu Ala Val Ser Pro Leu Leu Leu
 65 70 75 80

Val Thr Ile Leu Arg Asn Gln Arg Leu Arg Gln Glu Pro His Tyr Leu
 85 90 95

Leu Pro Ala Asn Ile Leu Leu Ser Asp Leu Ala Tyr Ile Leu Leu His
 100 105 110

Met Leu Ile Ser Ser Ser Ser Leu Gly Gly Trp Glu Leu Gly Arg Met
 115 120 125

Ala Cys Gly Ile Leu Thr Asp Ala Val Phe Ala Ala Cys Thr Ser Thr
 130 135 140

Ile Leu Ser Phe Thr Ala Ile Val Leu His Thr Tyr Leu Ala Val Ile
 145 150 155 160

His Pro Leu Arg Tyr Leu Ser Phe Met Ser His Gly Ala Ala Trp Lys
 165 170 175

Ala Val Ala Leu Ile Trp Leu Val Ala Cys Cys Phe Pro Thr Phe Leu
 180 185 190

Ile Trp Leu Ser Lys Trp Gln Asp Ala Gln Leu Glu Glu Gln Gly Ala

195

200

Ser Tyr Ile Leu Pro Pro Ser Met Gly Thr
210 215

<210> 90
<211> 223
<212> PRT
<213> Homo sapiens

<400> 90

His Phe Lys Ile Asn Leu Phe Pro Val Asn Leu Cys Ser Ser Ser His
1 5 10 15
Pro Leu Phe Asn Glu Leu Pro Pro Phe Pro Thr Leu Phe Leu Ala Phe
20 25 30
Ile Pro Met Val Pro Leu Lys Val Phe Ser Ser Ser Leu Pro Phe Ser
35 40 45
Pro Pro Val Phe Ser Gly Val Asn Gly Ala Ala Asn Ser Pro Ser Ser
50 55 60
Ser Cys Leu Asn Arg Ser Ser Pro Thr Pro Ala Ala Ala Pro Tyr
65 70 75 80
Ser Gln Ser Gln Ser Pro Val Cys Val Ile Ala Gly Met Ser Leu Glu
85 90 95
Ser Thr Asn Ile Leu Tyr Ser His Thr Cys Leu Pro Pro Met Ser Ser
100 105 110
Ala Pro Leu Leu Val Ser Glu Phe Gln Val Gly Pro Val Pro Phe Phe
115 120 125
Leu Pro Cys Arg Leu Ser Arg Thr Arg Ser Leu Pro Thr Ser Asp Phe
130 135 140
Leu Ser Asp Asp Phe Trp Gly Phe Ser Ile Cys Leu Leu Glu Gly Pro
145 150 155 160
Leu Gly Asp Phe Tyr Gly Thr Leu Ile Ala Ser Phe Leu Tyr Leu Arg
165 170 175
Asn Val Phe Leu Leu Leu Glu Thr Pro Lys Ile His Asp Ile Phe Phe
180 185 190
Thr Lys Leu Phe Leu Leu Ser Pro Ala Phe Asn Lys Ser Leu Phe Ala
195 200 205
Lys Lys Trp Cys Arg Phe Phe Thr Thr Ala Ser Gly Lys Ser Val
210 215 220

<210> 91
<211> 193
<212> PRT
<213> Homo sapiens

<400> 91

Phe Pro Arg Ile Val Cys Thr Val Thr Gly Val Ala Val Tyr His Ser
1 5 10 15
Ile Tyr Thr Ser Ile Trp His Thr Ala Gly Ala Ser Gly Thr Thr Tyr

20

25

30

Gln Ser Val Ser Leu Pro Asp His Phe His Asp Val Leu Ser Tyr Leu
 35 40 45
 Pro Cys Asn Lys Leu Val Asn Val Tyr Asp Cys Phe Val Ile Pro Met
 50 55 60
 Gln Ser Cys Asn Asn Asn Met Tyr Phe Lys Asn Leu Gly Ile Phe Leu
 65 70 75 80
 His Thr Ile Ser Ser Ile His Ile Asn Glu Lys Ser Lys Leu Gly Val
 85 90 95
 Ser Val Lys His Trp Ile Phe Thr Met Leu Ile Gly Val Pro Phe Ile
 100 105 110
 Ile Ala Ala Tyr Arg His Ile Ala Ile Val Pro Cys Thr Phe Asn His
 115 120 125
 Gln Cys Cys Gln Ala Ser Lys Ala Val Asn Val Tyr Leu Gly Leu Ile
 130 135 140
 Ile Arg Ile Thr Arg Asn Asn Phe Phe Asn Phe Asn Ile Leu Phe Phe
 145 150 155 160
 His Arg Leu Leu Gly Tyr Arg Cys Cys Leu Ile Thr Val Leu Tyr Trp
 165 170 175
 Phe Glu Arg Phe Gly Cys Thr Gln His Pro Ser Ser Ile His Tyr Ser
 180 185 190
 Leu
 <210> 92
 <211> 191
 <212> PRT
 <213> Homo sapiens
 <400> 92
 Gly Leu Phe Arg Glu Pro Leu Glu Ile Pro Pro Pro Trp His Gln Leu
 1 5 10 30 15
 Pro Pro Pro Pro Glu Leu Thr Val Ser Ser Leu Asp Ala Ala Pro Gly
 20 25 30
 Lys Val Ile Asn Asn Gln Val Ser Lys Gln Cys Trp Ala Val Phe Leu
 35 40 45
 Ile Leu Pro Phe Pro Asn Trp Val Leu Phe Gly Lys Leu Leu Ser Tyr
 50 55 60
 Phe Ile Cys Thr Met Gly Tyr Thr Tyr Ala Phe Tyr Ile Trp Leu Leu
 65 70 75 80
 Arg Arg Leu Ser Asp Met His Thr Lys Asn Ala Glu Gln Asn Thr Leu
 85 90 95
 Ser Ile Ser Phe Leu Ser Val Ile Lys Trp Arg Pro Leu Arg Leu Ser
 100 105 110
 Asn Leu Leu Leu Trp Leu Ile Leu Val Leu Ile Leu Ile Tyr Lys
 115 120 125

Ala Val Lys Glu Ile Gln Thr Lys Asn Ser Phe Cys Pro Ser Ser Phe
65 70 75 80

Asn Cys Leu Arg Gly Ala Trp Asp Trp Ala Thr Tyr Trp Ala Gly His
85 90 95

Leu Gln Arg Ile Leu Gln Gly Lys Gly Thr Gln Thr Ser Gly Leu Glu
100 105 110

Ser Lys Phe Lys Ser Cys Gly Val Gly Tyr Met Leu Gln Glu Ile Arg
115 120 125

Glu Ser Val Asn Pro Glu Ile Gly Glu Ala Asp Ser Pro Arg Lys Asp
130 135 140

Asn Ser Glu Trp Ser Leu Glu Gly Arg Val Arg Leu Glu Leu Glu Pro
145 150 155 160

Glu Val His Ala Ser Ala Ser Val Val Ser Arg Asp Met Thr Lys Leu
165 170 175

Glu Arg Arg Lys Ala Arg Asn Gly Trp Gly Trp Lys Leu Leu Asp
180 185 190

Ala Ser Gln Thr Lys Gly Ile Leu Asp Pro
195 200

<210> 95
<211> 178
<212> PRT
<213> Homo sapiens

<400> 95

Lys Leu Ser Val Phe Ile Pro Leu Gln Thr His Thr Pro Asn Ile Gln
1 5 10

Trp Glu Arg Asn Asn Ile Thr Ala Glu Val Ser Glu Arg His Lys
20 25 30

Ala Val Ile Gly Ser Leu Leu Asn Ser Pro Arg Gln Met Leu Pro Gly
35 40 45

Ser Leu Pro Trp Gly Gly Leu Val Ile Phe Leu Glu Val Val Ser Ser
50 55 60

Ser Leu Phe Ser Thr Val Leu Gln Leu Pro His Pro Ser Ser Cys Leu
65 70 75 80

Leu Arg Ser Leu Tyr Pro Leu Asp Ser Arg Leu Leu Asp Val Leu
85 90 95

Thr Phe Leu Gln Gln Lys Leu Ser Leu Phe Leu Asn Leu Phe Ala Val
100 105 110

His Arg Lys Trp Lys Val Gln Arg Leu Leu Phe Asn Phe Leu Ser Leu
115 120 125

Phe Ile Ala Ser Trp Val Pro Phe Thr Tyr Ile Thr Leu Leu Lys Ser
130 135 140

Phe Cys Gly Leu Ser Met Tyr Gln Ile Ile Asp His Phe Ile Lys Ala
145 150 155 160

Thr Phe Phe Val Phe Gln Thr Ser Phe Leu Tyr Phe Gly Gln Val Arg
 165 170 175

Pro Leu

<210> 96 -
 <211> 191
 <212> PRT
 <213> Homo sapiens

<400> 96

Met Val Phe Val Arg Ser Tyr Cys Pro Lys Ser Leu Phe Cys Pro Ser
 1 5 10 15

Tyr Asp Ile Cys Phe Asn Ile Asn Asp Ala Gln Leu Cys Leu Asp Pro
 20 25 30

Lys Arg Arg Ser Leu Tyr Asp Phe Pro Cys Cys Tyr Gly Gln Glu Phe
 35 40 45

Ser Phe Lys Leu Phe Trp Gly Leu Ala Thr Arg Gly Ser Val Gln Ser
 50 55 60

Val Gln Arg Ala Asp Leu Ser Ser Leu Ile His Ile Pro Pro Phe Trp
 65 70 75 80

Ser Lys Tyr Ala Lys Ser Ser Ile Asn Ser Gln Ala Leu Ile Ser Phe
 85 90 95

His Ile Ile Thr Arg Trp Cys Gly Tyr Leu Ser Gln Ile Tyr Ser Val
 100 105 110

Leu Gln Trp Asp Pro Tyr Ser Gln Gly Thr Tyr Ser Gln Lys Thr Tyr
 115 120 125

Ser Gln Leu Asn Ile Leu Gly Gln Lys Gly Met Glu Val Gly Arg His
 130 135 140

Ser Leu Phe Leu Lys Asn Leu Leu Ser Asn Ile Arg Ala Thr Asn Gln
 145 150 155 160

Lys Pro Lys Ser Lys Leu Thr Lys Pro Ile Tyr Leu Val Leu Cys Val
 165 170 175

Gly Pro Ser Ala Leu Arg His Leu Ala His Leu Phe Trp Arg Ile
 180 185 190

<210> 97
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 97

Gly Arg Gly Gly Gln Gln Gly Gly Leu Gln Asn His Asp Val Phe Leu
 1 5 10 15

Thr Gly Leu Thr Ser Ala Ser Ile Cys Leu Thr Leu Gln Pro Met Ser
 20 25 30

Leu Phe Leu Val Val Ile Leu Met Gly Ala Leu Arg Ser Gln Arg Arg
 35 40 45

Gly Leu Arg Arg His Cys Leu Tyr Leu Trp Ser Tyr Ile Arg His Leu
 50 55 60

Tyr Phe Val Met Asn Ser Lys Ser Ser Ser Lys Met Gln Leu Trp Gly
 65 70 75 80

Asn Ser His Arg Asn Phe Ser Gln Phe Trp Leu
 85 90

<210> 98
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 98

Ser Arg Asp Gln Ile Thr Pro Ser Arg Ser Trp Arg Lys Asp Pro Ser
 1 5 10 15

Ser Glu Gly Thr Trp Leu Gly Gly Leu Ser Val Ser Gly Ser Cys Val
 20 25 30

Gly Ile Ser His Ser Val Gly Ala Ser Val Ile Ala Gly Trp Pro Phe
 35 40 45

Asp Asn Ala Thr Cys Lys Met Ser Gly Leu Val Gln Gly Met Ser Val
 50 55 60

Ser Ala Ser Val Phe Thr Leu Val Ala Ile Ala Val Glu Arg Glu Val
 65 70 75 80

Ser Trp Leu Asp Tyr Ala Ala Asn Gly Leu Ala Leu Arg Gly Ala Thr
 85 90 95

Ala Ser Asn Ala Gly Leu Ala Gly Arg Leu Gly Leu His His Gly Lys
 100 105 110

Trp Gly Ile Leu Ser His Lys Glu Lys Gly Pro Gly Pro Ser Cys Pro
 115 120 125

Leu Pro Lys Leu Gly Glu Pro Asp Glu Asp Thr Thr Pro Phe Trp
 130 135 140

Lys Ala Arg Pro Trp Leu Ala Phe Val Gly Ile Pro Gly Ala Cys Glu
 145 150 155 160

Glu Leu Lys Ser Ser Pro Tyr Phe Leu Ser Ser Arg Asn Pro Ala Thr
 165 170 175

Ser Lys Ser Glu Pro Gly Glu Pro Glu Leu Arg Gly Pro Ala Tyr Gly
 180 185 190

Trp Val Thr Val Trp Leu Gly Arg Lys
 195 200

<210> 99
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 99

Thr Pro Lys Arg Leu Lys Leu Arg Ser Leu Ile Leu Ser Ser Val Lys
 1 5 10 15

Glu Phe Leu Glu Ser Pro Pro Ser Leu Gly Met Phe Leu Ser Ser Trp
20 25 30

Phe Asn Ile Ala Ala Asp Ala Pro Ala Ile Thr Ala Thr Phe Gln Thr
35 40 45

Ala Lys Tyr Gly Lys Arg Met Lys Arg Arg Arg Ala Cys Leu Gly Val
50 55 60

Pro Cys Ile Ile Ser Ile Tyr Ile Trp Ala Glu Pro Ser His Arg Ala
65 70 75 80

Thr Pro Tyr Val Ser Val Ser Tyr Cys Tyr Ile Ala Thr Thr Lys Phe
85 90 95

Pro Cys His Thr Thr His Ile Cys Arg Leu Ala Arg Val Gln Phe Leu
100 105 110

His Ala Gly Leu Arg Gln Ala Val Leu Leu Arg Val Thr Val Ala Glu
115 120 125

Leu Ile Pro Phe Leu Thr Ala Gly Leu Cys Phe Ser Val Thr Val Pro
130 135 140

Cys Ala Phe His Leu Pro Trp Val Asp Glu Arg Lys Pro His Leu Ser
145 150 155 160

Thr Gly Leu Ala Thr Ser Val Pro His Gly Pro Lys Arg His Gln Arg
165 170 175

Ala Asp Arg Asn Arg Asp Leu Leu Arg Ser Arg Leu Lys Thr Gly Thr
180 185 190

Leu Pro Arg Leu Phe Thr Ser Tyr Pro Lys His Arg Cys Ile Thr Lys
195 200 205

Pro Gln Val Lys Gly Lys Lys Tyr Asn Pro
210 215

<210> 100

<211> 175

<212> PRT

<213> Homo sapiens

<400> 100

Thr Ile Ile Cys Cys Ile Phe Gln Asn Ser Cys Asn Val Ser Asn Thr
1 5 10 15

Lys Lys Arg Met Phe Val Val Met His Ile Ser Ser Thr Leu Ile Leu
20 25 30

His Ile Val Tyr Ile Tyr Gln Asn Ile Ser Ser Thr Ser Lys Ile Cys
35 40 45

Ser Ile Ile Val Val Gln Lys Asn Leu Asn Tyr Asn Val Leu Phe
50 55 60

Ile Ser Lys Trp Phe Ile Arg Phe Lys Ile Phe Leu Val Phe Asn Phe
65 70 75 80

Phe Ile Tyr Tyr Leu ile Pro Phe Asn Phe Leu Lys Tyr Ile Arg Ser
85 90 95

Ser Tyr Phe Arg Val Lys Phe Lys Ser Phe Glu Tyr Leu Ile Leu Gln

100

105

110

Ser Phe Leu Pro Leu Ile Phe Pro Gln Trp Pro Val Ser Val Val Met
115 120 125

Met Leu Leu Arg Asn Gly Leu Ala Thr Cys Thr Lys Pro Ile Leu Trp
130 135 140

Gln Trp Phe Ser Arg Lys Glu Lys Ala Leu Leu Val Tyr Trp Gln Gly
145 150 155 160

Asp Arg Trp Gln His Ser Asn Leu Ser Pro Thr Glu Asp Gly Gly
165 170 175

<210> 101

<211> 184

<212> PRT

<213> Homo sapiens

<400> 101

Ser Tyr Leu Gly Pro Val His Ser Phe Ser Gln Thr Ala Ser His Ala
1 5 10 15

Ile Pro Ser Met Lys Ile Leu Pro Phe Pro Leu Ser Phe Phe Ser Ser
20 25 30

Leu Ile Tyr Ser Pro Val Leu Val Ser Ser Phe Pro Ser Ser Gly
35 40 45

Gln Thr Leu Phe Thr Ser Leu Thr Thr Pro Ser Lys Ile Val Leu Ile
50 55 60

Thr Val Tyr Pro Leu Asn Thr Leu Tyr Arg Ser Trp Pro Ser Pro Asp
65 70 75 80

Asn Val Leu Cys Ile Phe Trp Phe Thr Cys Cys Val Ser Ser Phe Leu
85 90 95

His Cys Cys Lys Glu Ile Pro Glu Thr Gly Phe Ile Lys Lys Arg Gly
100 105 110

Leu Ile Asp Ser Gln Phe Cys Arg Leu Tyr Gly Lys His Val Ala Gly
115 120 125

Ile Cys Leu Ala Ser Gly Glu Asp Ser Gly Asn Leu Gln Ser Trp Gly
130 135 140

Arg Arg Gly Ser Arg His Ile His Ser Arg Ser Ser Lys Ala Lys Gly
145 150 155 160

Asp Val Pro His Thr Ser Lys Pro Asp Leu Met Arg Thr His Tyr His
165 170 175

Glu Asn Ser Thr Arg Gly Trp Cys
180

<210> 102

<211> 212

<212> PRT

<213> Homo sapiens

<400> 102

Tyr Asn Asn Ser Leu Leu Tyr Ile Ser Ile Phe Cys Leu Ser Gln Val

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Ser Arg Arg Arg Glu Ala Ser Gln Leu Ala Thr Gly Tyr Lys Ser Ile
 100 105 110
 Ala Glu Asn Asp Lys Arg Gln Gly Pro Ser Leu Gln Arg Ser Ala Lys
 115 120 125
 Lys Ile Leu Asn Val Tyr Lys Asp Leu Lys Arg Asn Ser Pro Arg Gln
 130 135 140
 His Tyr Ser Val Leu Asp Tyr Gly Tyr Tyr Thr Leu Leu Gln Leu Leu
 145 150 155 160
 Cys Ser Ser Glu Gln Lys Thr Glu Asp Phe Glu Met Ser Thr Thr Pro
 165 170 175
 Ala Pro Glu Tyr Asn Gly Thr Phe His Leu Phe Leu Val Thr Phe Ile
 180 185 190
 Phe Phe Cys Cys Trp Ile Pro Tyr Ile Ile Val Ser Ile Ser Gln Ala
 195 200 205
 Ser Thr Met Val Asn Ser Gly Trp Thr Leu Pro
 210 215
 <210> 104
 <211> 208
 <212> PRT
 <213> Homo sapiens
 <400> 104
 Arg Thr Leu Tyr Trp Tyr Phe Tyr Phe Lys Phe Ser Ile Phe Gly Met
 1 5 10 15
 Ala Glu Cys Cys Tyr Lys Val Ser Arg Ser Pro Leu Pro Leu His Cys
 20 25 30
 Ala Asp Leu Leu Ser Ser Ile Gln Gly Thr Asp Leu Arg Asn Leu Gln
 35 40 45
 Val Val Thr Ser Cys Leu Val Phe Phe Leu Gly Arg Tyr Pro Ser Leu
 50 55 60
 Gln Thr Cys Arg Asn Leu Asn Leu Leu Pro Leu Thr Tyr Leu Val Pro
 65 70 75 80
 Cys Gly Leu His Phe Thr Val Cys Ala Asn Ser Leu Phe Ile Thr Ile
 85 90 95
 Leu Thr Leu Asp Ser Arg Ala Ser Pro Thr Ser Pro Phe Ser Val Thr
 100 105 110
 Leu Thr Phe Leu Leu Ser Val Thr Met Ser Asp Leu Leu Phe Ser Pro
 115 120 125
 Ile Phe Cys Pro Leu Gln Ile Leu Lys Pro Ser Phe Trp Phe Arg Pro
 130 135 140
 Leu Lys Gly Val Thr Gly Val Cys Tyr Pro Lys Val Val Pro Lys Ile
 145 150 155 160
 Ser Lys Leu Glu Lys Lys Thr Lys Asn Lys Lys Ile Pro Tyr Pro Ser
 165 170 175

Trp Met Phe Leu Lys Gly Phe Leu Gly Gln Val His Val Arg Ile Ala
180 185 190

Gly Val Ser Leu Gln Lys Asp Phe Ser Trp Pro Ser Phe Val Thr Val
195 200 205

<210> 105
<211> 231
<212> PRT
<213> Homo sapiens
<400> 105

Met Lys Pro Val Leu Pro Pro Ala Lys Arg Thr Glu Ser Leu Asn Gly
1 5 10 15

Met Val Asp Ala Ala Tyr Trp Thr Val Tyr Phe Ile Leu Ala Ala Pro
20 25 30

Gly Ile Cys Val Ile Ser Leu Glu Met Phe Tyr Met Cys Leu Val Glu
35 40 45

Leu Gln Asn Asn Thr Ser Leu Asn Ile Ser Cys Ile Thr Gly Ser Ile
50 55 60

Gln Phe Ile His Asn Lys Val Ser Pro Val Leu Tyr Arg Arg Ile Tyr
65 70 75 80

Lys His Ser Val Lys Ser Ile Asp Arg Ile Gly Asp Arg Gly Leu Lys
85 90 95

Ile Lys Ile Asn Ala Phe Leu Val Leu Phe Gly Val Gly Lys Ser Asn
100 105 110

Leu Phe Phe Met Leu His Arg Ser Gln Phe Phe Val Phe Phe Glu Ser
115 120 125

Arg Pro Val Ile Gly Arg Cys Lys Glu Pro Lys Arg Lys Asn Gln Lys
130 135 140

Pro Thr Ala Ser Phe Gln Asn Arg Ser Gln Lys Arg Lys Glu Tyr Glu
145 150 155 160

Ser Ser Arg Ser Phe Asn Cys Ser Phe Ile Ile Ser Ser Arg Lys Arg
165 170 175

Gly Cys Met Ile Val Ser Lys Thr Lys Glu Glu Thr Ala Lys Glu Arg
180 185 190

Asn Val Gly Asn Leu Leu Val Glu Ala Met Thr Leu Leu Gly Glu Ile
195 200 205

Leu Ser His Phe Leu Ser Ser Cys Phe Ser Ile Met Phe Phe Thr Leu
210 215 220

Ser Ile Gln Tyr Lys Thr Leu
225 230

<210> 106
<211> 188
<212> PRT
<213> Homo sapiens
<400> 106

Ser Glu Asp Leu Gln His Arg Val Lys Tyr Ala Arg Glu Gly His Ile
 1 5 10 15
 Thr Phe Ile Phe Thr Phe Ile Leu Ile Tyr Phe Leu Ser Ile Asn Leu
 20 25 30
 Phe Cys Phe Tyr Ile Ser Val Val Ala Gln Asn Ser Asn Cys Ser Lys
 35 40 45
 Asn His Ser Gly Leu Asn Thr Gly Lys Ile Ser Phe Gly Thr His Asn
 50 55 60
 Gly Leu Lys Asn Ser Cys Val Pro Phe Thr Gly Glu Ile Arg Lys Gly
 65 70 75 80
 Ile Glu Lys Phe Pro Ile Pro Pro Asn Pro Ala Ser Pro Ile Pro Ile
 85 90 95
 Ser Arg Thr Ser Phe His Leu Ile Ser Leu His Leu Gln Met Val Val
 100 105 110
 Leu Asn Leu Gln Ile Asn Lys Pro Lys Thr Glu Ser Ile Ile Phe Ser
 115 120 125
 His Leu Val Phe Pro Ser Asn Ser Leu Ile Ser Val Thr Cys Pro Ile
 130 135 140
 Thr Leu Pro Gly Ile Gln Pro Pro Lys Gln Gly Gly Leu Leu Pro Leu
 145 150 155 160
 Gln Trp Thr Pro Gly Ile Gln Val Leu Leu Leu Ala Pro Lys Cys Pro
 165 170 175
 Gln Cys Pro Val Leu Pro Asn Gln His Ile Gln Gln
 180 185
 <210> 107
 <211> 230
 <212> PRT
 <213> Homo sapiens
 <400> 107
 His Cys Asn Gly His Cys Arg Phe Ser Arg Leu Ser Pro Glu Gly Glu
 1 5 10 15
 Trp Pro Pro Phe Lys Val Cys Ser Glu Asn Thr Pro Gly Ser Arg
 20 25 30
 Ala Ile Val His Lys Asp Ala Leu Gly Ser Val Val Leu Thr Asn Val
 35 40 45
 Glu Thr Tyr Arg Ala Leu Val Ala Glu Ala His Ser Asn Gln Pro Lys
 50 55 60
 Leu Gly Arg Arg Ala Gly Ala Gln Cys Ile Trp Glu Gly His Arg Leu
 65 70 75 80
 Gly Ser Pro Ser Ser Ser Gly Pro Pro Ser Arg Met Ile Gly Leu Arg
 85 90 95
 Pro Pro Ser Gly Ser Pro Arg Arg Gln Pro Ser Ser Glu Glu Ser Gly
 100 105 110
 Asp Lys Arg Ser Ala His Leu His His Ser Leu Pro Glu Thr Arg Leu

115

120

125

Asn Cys Ile Ile Cys Phe Cys Pro Thr Cys His Lys Pro Thr Ile Trp
 130 135 140

Ser Asn Ala Arg Pro His Pro Arg Lys Thr Arg Pro Gln Pro Trp Ala
 145 150 155 160

Leu Glu Gly Leu Cys Tyr His Leu Pro His Ala Leu Gln Lys Ser Asp
 165 170 175

Glu Ser Ser Pro Ile Ile Pro Thr Leu Ser Leu Arg Ser Pro Trp Met
 180 185 190

Pro Arg Gly Arg Arg Phe Asn Met Gly Gln Lys Val Ala Thr Thr Glu
 195 200 205

Leu Leu Gly Ser Ser Pro Tyr Leu Leu Ser Leu Asp Leu Leu Pro Gly
 210 215 220

Leu Gln Arg Val Lys Ser
 225 230

<210> 108

<211> 178

<212> PRT

<213> Homo sapiens

<400> 108

Phe Arg Ser Lys Phe Ile Pro Val Gly Glu Gly Leu Val Glu Val Glu
 1 5 10 15

Gln Gly Gln Arg Val Gln Val Glu Tyr Ser Asn Phe Lys Asn Leu Lys
 20 25 30

Ser Glu Thr Leu Gln Asn Leu Lys Leu Phe Glu His His Asp Thr Gln
 35 40 45

Arg Lys Tyr Ser Leu Asp Ser Arg Phe Leu Tyr Leu Glu Gly Ser Thr
 50 55 60

Lys Arg Tyr Asp Ile Asn Ile Pro Lys Phe Lys Asn Ile Asn Ser Lys
 65 70 75 80

His Phe Pro Gln Ala Phe Trp Ile Lys Asp Thr Gln Thr Gly Ile Arg
 85 90 95

Ser Trp Leu Pro Glu Glu Glu Thr Gly Glu Asp Ile Pro Val Val Ala
 100 105 110

Leu Met Lys Gly Trp Gly Pro Glu Asn Gln His Pro Leu Phe Gly Cys
 115 120 125

Phe Leu Leu Trp Arg Val Ala Leu Glu Gly Gly Pro Pro Phe Ile His
 130 135 140

Val Leu Ser Gly Arg Pro Phe Thr Leu Arg Gly Ala Ser Leu Pro Cys
 145 150 155 160

Leu Asp Phe Pro Gly Leu Cys Pro Leu Ser Ala Glu Val Lys Val Ser
 165 170 175

Gly His

<210> 109
 <211> 237
 <212> PRT
 <213> Homo sapiens

<400> 109

Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser His Cys Ala Gly
 1 5 10 15
 Arg Ser Leu Val Ser Phe Tyr Ser Ala Val Met Cys His Ile Thr Met
 20 25 30
 Leu Pro Ser Met Ile Asp Cys Val Tyr Asn Thr Arg Pro Val Arg Ser
 35 40 45
 Tyr Cys Thr Leu Leu Tyr Leu Phe Cys Val Glu Ile His Arg Tyr Leu
 50 55 60
 Ala Leu Cys Tyr Ser Arg Gln Arg Pro Ala Gln Gln His Gly Met
 65 70 75 80
 Gln Ala Trp Gly Leu Glu Leu Thr Gly Cys Thr Thr Gly Pro Gly Val
 85 90 95
 Arg Gln Pro His Arg Leu Gly Leu Arg Glu Cys Ile His Ala Val Cys
 100 105 110
 Ala Arg Thr Arg Phe Ser Asp Arg Val Leu Ala Val Ser Leu His Met
 115 120 125
 Thr Val Leu Ile Phe Glu Trp Ser His Val Phe Gly Leu Leu Asn Arg
 130 135 140
 Met Phe Val Phe Ser Glu Lys Met Pro Ile Ala Ser His Leu Gln Leu
 145 150 155 160
 His Gln Phe Arg Phe Arg Phe Glu Leu Lys Cys Asp Leu Ser Ile Gln
 165 170 175
 Lys Lys Ser Ile Ser Thr Phe Gly Lys Ile Ser Arg Leu Lys Lys Thr
 180 185 190
 Phe Arg Val Phe Lys Arg Thr Ser Ser Val Lys Ser Ser Ile Leu Lys
 195 200 205
 Gly Cys Pro Ile Asn Lys Leu Leu Trp Asn Cys Phe Ile Ser Ala Leu
 210 215 220
 Phe Leu Cys Gly Thr His Ser Ser Lys Thr Ala Glu Asp
 225 230 235

<210> 110
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 110

Phe Phe Leu Phe Leu Ser Leu Ser Phe Ser Phe Cys Leu Lys Ile Met
 1 5 10 15
 Lys Asn Ala Gly Ser Val Glu Arg Arg Lys Cys Pro Cys Pro Thr Ser
 20 25 30

Cys Arg Tyr Leu Ser Cys Phe Phe Ile Leu Leu Lys Ile Glu Leu Lys
 35 40 45
 Val Phe His Phe Leu Phe Phe Asn Phe Arg Gly Tyr Asn Gly Asp Ser
 50 55 60
 Gly Thr Asn Arg Lys Phe Val Phe Thr Arg Pro Val Lys Arg Val Phe
 65 70 75 80
 Leu Leu Ile Pro Val Phe Val Ser Gly Cys Met Ala Ile Ala Ser Lys
 85 90 95
 Phe Phe Pro Leu Phe Pro Ser Pro Ile Thr Gln Arg Val Ser Ser Phe
 100 105 110
 Asn Thr Leu Glu Ser Ile Leu Leu Asp Ala Thr Thr His Met Cys Val
 115 120 125
 Asn Glu Asn Thr Asp Lys Lys Ser Leu Asn Ile Gly Asn Gly Val Ile
 130 135 140
 His Ala Phe Leu Thr Leu Ile Phe Leu Leu Phe Trp Ile Pro Phe His
 145 150 155 160
 Val Ser Tyr Ile Tyr Pro Ile Tyr Phe Gln Asp Cys Val Ile Phe Tyr
 165 170 175
 Ser Ile Val Leu Thr Phe Phe Met Leu Ser Gln Leu Val Thr Tyr Tyr
 180 185 190
 Val Tyr Glu Leu Phe Leu Leu Leu Met Leu Lys Ile Ser Trp Asp Lys
 195 200 205
 Leu Leu Gly Val Leu Phe Glu Ser Phe Leu Gly Ile Lys
 210 215 220
 <210> 111
 <211> 235
 <212> FRT
 <213> Homo sapiens
 <400> 111
 Phe Glu Asp Lys Phe Leu Leu Thr Val Val Ile Thr Arg Gly Leu Ile
 1 5 10 15
 Ser Thr Leu Leu Glu Ser Leu Thr Tyr His Asn Phe Ser Met Leu Cys
 20 25 30
 Glu Gly Met Asn Ser Leu Thr His Leu Ile Met Thr Thr His Ile Met
 35 40 45
 Leu Leu Ile Gly Asn Asp Leu Tyr Glu Thr Tyr Arg Lys His Ile Thr
 50 55 60
 Ala Ser Gln Met Thr Pro Ile Ser Pro Ile Ala Val Ser Asp Lys Phe
 65 70 75 80
 Glu Ser Gly Pro Met His Leu Cys Trp Ala Pro Gln Asn Lys Glu Val
 85 90 95
 Asp Tyr Leu Arg Ser Thr Thr Leu Ala Ile Ser Pro Leu Asn Ile Lys
 100 105 110

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Leu Ile Cys Pro Ile Ala Pro Pro Ser Ser Gly Pro Gly Leu Trp Ile
115 120 125

Gly Met Thr Tyr Leu His Ile Gln Phe Cys Lys Ser Leu Gly Ile Ile
130 135 140

Gln Asp Gly Arg Ile Asn Gly Gln Leu Lys Leu Phe Leu Leu Ser His
145 150 155 160

Pro Phe Gln Cys Phe Leu Pro Trp Ser Ser Leu Leu Ile Ile Ser Met Leu
165 170 175

Phe Asn Ile Tyr Leu Glu Glu Phe Met Ala Val Ile Thr Ile Met Ala
180 185 190

Thr Ile Phe Tyr Tyr Leu Cys Met Pro Gly Ile Val Leu Ser Ala Ser
195 200 205

Gly Ile Arg Ser Cys Lys Gly Leu Val Thr Phe Tyr Arg Trp Asp Trp
210 215 220

Asp Ser Asp Val Ser Cys Leu Phe Lys Ser Ile
225 230 235

<210> 112

<211> 134

<212> PRT

<213> Homo sapiens

<400> 112

Ser Ser Pro Val Val Cys Trp Gln Ser Leu Ala Phe Leu Ser Leu Trp
1 5 10 15

Lys Tyr His Ser Ile Ser Val Leu Ile Ser Thr Trp Cys Ser Ser Cys
20 25 30

Val His Val Cys Leu Gln Ile Ser Pro Phe Tyr Lys Asp Thr Val Ile
35 40 45

Leu Asp Ser Gly Ser Phe Arg Pro His Leu Ile Phe His Lys Asp Pro
50 55 60

Ile Ser Lys Cys His Ile Leu Trp Tyr Trp Gly Leu Leu Lys His Ile
65 70 75 80

Asn Phe Arg Glu Thr Asn Leu Asn Leu Gln Tyr Thr Ser Arg Met Glu
85 90 95

Glu His Gly Ile Arg Leu Ser Gln Thr Gln Leu Leu Thr Phe Trp Phe
100 105 110

Ser Ser Pro Gly Gln Glu Thr Pro Ser Ala Gly Lys Leu Glu Thr Trp
115 120 125

Lys Thr Gly Leu Lys Thr
130

<210> 113

<211> 229

<212> PRT

<213> Homo sapiens

<400> 113

His Thr Asp Thr His Ser His Ile His Thr Gln Ser Leu Ile Lys Tyr
1 5 10 15

Met Ile Ile Phe Met Cys Lys Ser Phe Gln Gln Ile Ile Ile Phe Tyr
20 25 30

Ile Arg Ala Cys Tyr Lys Glu Lys Ile Tyr Gln Phe Glu Lys Gly Lys
35 40 45

Pro Leu Ser Arg Tyr Cys Phe Ile Arg Thr Val Val Ser His Ile Ile
50 55 60

Ser Lys Leu Leu Met Lys Tyr Lys Thr Phe Thr Ile Ile Lys Ser Leu
65 70 75 80

Lys Arg Thr Lys Asn Lys Leu His Lys Leu Lys Ser Ser Val Ala Asn
85 90 95

Met Met Phe Cys Glu Leu Leu Ile Val Tyr Val Cys Ile Tyr Ala Trp
100 105 110

Tyr Leu Pro Gly Ile Cys Phe Met Phe Leu Arg Pro Gln His Cys Cys
115 120 125

Lys Arg Ile Val Phe Pro Leu Leu Tyr Asn Tyr Phe Asp Ile Ser Tyr
130 135 140

Asn Leu Pro His Glu Tyr Gln Thr Phe Tyr Arg Lys Tyr Leu Ile Pro
145 150 155 160

His Ser Leu Ser Pro Ala Ala Phe His Val Cys Leu Val Lys Ala Ile
165 170 175

Val Thr Lys Leu Pro Phe Phe Lys Glu Ala Ser Val Asn Gln Tyr Ile
180 185 190

Ser Leu Ser Leu Phe Phe Tyr Val Cys Leu Ser His Thr Asn Thr Gln
195 200 205

Ala Asn Ile Tyr Ile Tyr Ile Phe Asn Ile Thr Asp Ser Phe Leu Ala
210 215 220

Val Leu Ser Ile Ile
225

<210> 114

<211> 189

<212> PRT

<213> Homo sapiens

<400> 114

Ser Leu Leu Asn Leu Leu Phe Asn Met Asn Ile Ala Ser Leu Ala Leu
1 5 10 15

Phe Val Leu Thr Leu Tyr Ile Thr Phe His Leu Phe Ile Leu Ile Cys
20 25 30

Leu Tyr Ile Ser Ala Phe Leu Ile Gly Asn Ile Leu Ser Leu Ser Phe
35 40 45

Tyr Pro Ile His Leu Leu Asp Phe Glu Val Phe Lys Leu Phe Val Phe
50 55 60

Asn Val Asn Met Tyr Met Ile Gly Phe Lys Phe Thr Ser Trp Leu Val

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65 70 75 80

Phe Ser Val Tyr Ser Ile Tyr Tyr Ser Leu Phe Pro Phe Ser Ser Met
85 90 95

Leu Ser Phe Gly Leu Ile Ile Leu Leu Lys Ile Phe Arg Ile Ser Phe
100 - 105 110

Val Val Leu Phe Trp Leu Ile Cys His Leu Arg Leu Leu Ile Thr Val
115 120 125

Ile Phe Gln Val Thr Leu Tyr His Phe Val His Val Tyr Lys Thr Leu
130 135 140

Gln Gln Cys Thr Ser Ile Leu Cys Leu Leu Asn Phe Arg Leu Leu Leu
145 150 155 160

Ser Ser Tyr Ile Leu Phe Leu Phe Pro Thr Tyr Val Ile Arg Pro Ile
165 170 175

Leu His Cys Phe Cys Val Cys Phe Lys Lys Pro Ser Phe
180 185

<210> 115
<211> 242
<212> PRT
<213> Homo sapiens

<400> 115

Glu Glu Asn Ser Met Lys Ala Asp Lys Gly Arg Thr Glu Val Asn Gln
1 5 10 15

Cys Ser Ile Asp Leu Gly Glu Asp Asp Met Glu Phe Gly Glu Asp Asp
20 25 30

Ile Asn Phe Ser Glu Asp Asp Val Glu Ala Val Asn Ile Pro Glu Ser
35 40 45

Leu Pro Pro Ser Arg Arg Asn Ser Asn Ser Asn Pro Pro Leu Pro Arg
50 55 60

Cys Tyr Gln Cys Lys Ala Ala Lys Val Ile Phe Ile Ile Ile Phe Ser
65 70 75 80

Tyr Val Leu Ser Leu Gly Pro Tyr Cys Phe Leu Ala Val Leu Ala Val
85 90 95

Trp Val Asp Val Glu Thr Gln Val Pro Gln Trp Val Ile Thr Ile Ile
100 105 110

Ile Trp Leu Phe Phe Leu Gln Cys Cys Ile His Pro Tyr Val Tyr Gly
115 120 125

Tyr Met His Lys Thr Ile Lys Lys Glu Ile Gln Asp Met Leu Lys Lys
130 135 140

Phe Phe Cys Lys Glu Lys Pro Pro Lys Glu Asp Ser His Pro Asp Leu
145 150 155 160

Pro Gly Thr Glu Gly Thr Glu Gly Lys Ile Val Pro Ser Tyr Asp
165 170 175

Ser Ala Thr Phe Pro Ser Phe Gly Lys Pro Thr Val His Asn Thr Arg
180 185 190

Asn Lys Arg Arg Phe Leu Phe Asn Gly Pro Thr Ile His Cys Gln Thr
 195 200 205

Ile Pro Phe Gln Ala Lys Val Leu His Thr His Ala Leu His His Lys
 210 215 220

Val Asp Lys Tyr Ile Glu Glu Ala Gly Thr Gly Val Phe Pro Lys His
 225 230 235 240

Gly Leu

<210> 116

<211> 206

<212> PRT

<213> Homo sapiens

<400> 116

Ser Gly Lys Thr Thr Pro Arg Asn Arg Leu Leu Leu Pro Pro Cys Lys
 1 5 10 15

Pro Glu Ala Gln Leu Leu Ser Leu Glu Asn Arg Lys His Asn His Gly
 20 25 30

Tyr Ser Glu Gly Gln Gly Gln Val Leu Cys Lys Trp Asp Cys Gly Gly
 35 40 45

Gln Trp Glu Gly Phe Trp Gly Ser Leu Ser Cys Leu Cys Asn Trp Ala
 50 55 60

Met Gln Pro Cys Lys Cys Gln Glu Thr Leu Asn Lys Thr Glu Pro Glu
 65 70 75 80

Ala Asn Lys Lys Pro Ala Phe Thr Cys Ser Phe Pro Phe Cys Asn Glu
 85 90 95

Ile Ser Ile Cys Thr Leu Ile Trp Pro Thr Ile Pro Gly Glu Ile Ser
 100 105 110

Trp Asp Val Ser Phe Val Thr Leu Asn Phe Leu Val Pro Gly Leu Val
 115 120 125

Ile Val Ile Ser Tyr Ser Lys Ile Leu Gln Val Cys Phe Leu Gln Val
 130 135 140

Leu Pro Leu Asn Phe Thr Gln Ala Trp Gly Tyr Phe Cys Asn Leu Arg
 145 150 155 160

Ile Trp Gly Arg Arg Thr Pro Lys Ser Ser Arg Gln Leu Asn Leu Asp
 165 170 175

Ser Leu Pro Arg Ser Thr Thr Leu Arg Lys Glu Arg Ile Phe Leu Glu
 180 185 190

Val Ile Ser Leu Leu Cys Phe Leu Leu Ile Thr Lys Val Ile
 195 200 205

<210> 117

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<221> misc_feature
<223> Peptide substrate

<400> 117

Ala Pro Arg Thr Pto Gly Gly Arg Arg
1 5